

April 30, 2013

Mr. Gregg Protch McDonald's USA, LLC Omega Corporate Center, Suite 1390 1000 Omega Drive Pittsburgh, PA 15205

RE: Phase II Environmental Site Assessment McDonald's Edgewood Towne Centre Pittsburgh, PA

Dear Mr. Protch,

ACA Engineering, Inc. (ACA) has recently completed a limited Phase II Environmental Site Assessment (ESA) for McDonald's USA, LLC at the proposed McDonald's facility located along Towne Centre Drive at the Edgewood Towne Centre in Edgewood, Allegheny County, Pennsylvania (the Site). A location map is provided as Figure 1. The Phase II ESA consisted of the advancement of six (6) soil borings in the area of the proposed building and parking areas and four (4) soil borings in random areas where environmental impacts were possible based on historical site use. The limited ESA was performed in conjunction with the subsurface investigation conducted for geotechnical purposes. This Letter Report documents the methods, findings and conclusions associated with the Phase II ESA.

<u>Background</u>

A Phase I Environmental Site Assessment (ESA) was conducted on the subject property by ACA in January and February 2013¹. The Phase I ESA report documented recognized environmental conditions (RECs) associated with the historical use of the property as a portion of the former Union Switch & Signal Division (USSD) property which operated from approximately 1880 to approximately 1987. The ESA concluded that there were no specific areas of concern identified. However, on-site impacts were considered possible based on the historical industrial use of the site. In order to eliminate this historical use as an environmental risk/liability, the Phase I ESA report recommended that a Phase II ESA be completed. The Phase II ESA documented herein is intended to provide a limited characterization of the recognized environmental conditions identified in the Phase I ESA report and was performed in accordance with ACA's Proposal.

¹ ACA Engineering, Inc. Report Entitled "Phase I Environmental Site Assessment, Edgewood Borough Property, S. Braddock Ave., Edgewood, Allegheny County, Pennsylvania" Dated February 11, 2013.

The scope of work discussed in the referenced proposal included ten (10) soil borings and ten (10) soil samples all of which were analyzed for volatile organic compounds (VOCs). Additionally, five (5) soil samples were analyzed for Target Analyte List (TAL) Metals. Two (2) groundwater samples were also collected and analyzed for VOCs and TAL Metals.

Subsurface Investigation

Prior to conducting any field work at the property, all appropriate utilities were notified through the Pennsylvania One-Call service. Several utilities were located on or near the property but none were encountered during the soil boring program.

The soil borings were advanced on April 8 and 9, 2013 with a truck mounted drill rig equipped with 4.25 inch inside diameter hollow stem augers. Soil samples were collected using a decontaminated split spoon sampler that was mechanically driven ahead of the advancing augers to collect an undisturbed soil sample. Soil samples were collected on three foot centers in soil borings B-1 through B-6. Continuous sampling was performed in soil borings B-7 through B-10. Soil boring depths ranged from eight (8) feet below ground surface (bgs) in soil boring B-7 to 20 feet bgs in soil boring B-1. The soil boring locations are shown on the attached Figure.

Each soil sample was field screened for the presence of volatile organic vapors by headspace analysis using a photoionization detector (PID). The headspace measurements were collected by placing the soil in an airtight plastic bag, allowing the soil to remain undisturbed in the bag for a period of time and then obtaining a measurement with the PID. Based on field screening results or pertinent field observations (i.e., odors, staining, or proximity to the water table), one soil sample from each soil boring was submitted for laboratory analysis. The samples were collected in accordance with EPA Method 5035 for analysis of VOCs and placed in laboratory-supplied sample containers. All samples were placed on ice in a sample cooler for preservation and delivery to the laboratory.

No petroleum odors or staining were observed during boring advancement. Physical characteristics including soil type, color, and moisture were observed during sampling. Generally, subsurface soils encountered at the site consisted of brown clayey silt with varying amounts of sand and gravel. Some slag, brick, wood pieces, and other debris were encountered at various depths indicating fill material. Detailed observations are documented on the attached boring logs.

Perched groundwater was encountered in soil borings B-8 and B-9. Groundwater was not encountered in any of the remaining soil borings. Groundwater was collected from soil borings B-8 and B-9 directly from the borehole using dedicated disposable bailers and placed in laboratory supplied containers with appropriate preservative for analysis of VOCs and TAL metals. The samples were placed on ice in a sample cooler for preservation and delivery to the laboratory. The groundwater samples for TAL metals were subsequently filtered at the laboratory.

All soil and groundwater samples were submitted for laboratory analysis to Pace Analytical Services, Inc. in Greensburg, Pennsylvania. The laboratory analysis data resulting from this Phase II ESA was evaluated through comparison to regulatory limits established under the Pennsylvania Land Recycling Program (Act 2) for non-residential properties where the underlying groundwater is used as a source for drinking water and Act 2 screening values for soil to vapor intrusion evaluation. These limits are appropriate given the site is proposed to be non-residential in nature.

Results

Soil boring B-1 was advanced to a depth of approximately 20 feet. The remaining borings were advanced to a depth of approximately 15 feet with the exception of soil boring B-7. Auger refusal was encountered in soil boring B-7 at approximately eight (8) feet below the existing ground surface. Soil borings B-7 and B-8 were located at a topographically higher elevation than the remaining borings where sandstone was encountered in soil boring B-7. Generally, subsurface soils encountered at the site consisted of brown clayey silt with varying amounts of sand and gravel. Some slag, brick, wood pieces, and other debris were encountered at various depths indicating fill material.

Based on field observations and PID readings, one sample was collected from each of the 10 borings for analysis of VOC and TAL metal parameters. Perched groundwater was encountered in soil borings B-8 and B-9. Groundwater was not encountered in any of the remaining soil borings.

Groundwater samples were collected from soil borings B-8 and B-9 and analyzed for VOCs and TAL metals. The laboratory analysis results are attached and are summarized on Tables 1 through 4.

Soil Analytical Results

The soil analytical results were compared to the Act 2 non-residential medium specific concentrations (MSCs) for used aguifers and volatilization to indoor

air screening values. As indicated on Table 1, all VOC concentrations were below the applicable statewide health standards in each of the soil samples collected from soil borings B-1 through B-10. Metal constituents were identified in each of the five samples submitted for analysis. However, only the arsenic concentration in soil boring B-1 exceeded the Act 2 MSCs at 112 milligrams per kilogram (mg/kg).

Groundwater Analytical Results

Groundwater samples were submitted for laboratory analysis from soil borings B-8 and B-9. Groundwater was not encountered in any of the remaining soil borings. Groundwater analytical results for VOCs were compared to the Act 2 groundwater MSCs for non-residential used aquifer. The only VOC constituent detected in either of the two water samples was bromoethane in soil boring B-8 with a concentration of 1.9 micrograms per liter (ug/L) which is below the applicable MSCs. Several metal constituents were detected in the groundwater samples from both B-8 and B-9. The analytical results were compared to the Act 2 MSCs for inorganic regulated substances in groundwater for non-residential used aquifer. Manganese was detected in the groundwater sample from soil boring B-8 at a concentration of 7,600 ug/L which is above the applicable Act 2 standard. Concentrations of Cadmium (8.3 ug/L), Lead (15.2 ug/L), and Manganese (2,290 ug/L) in the groundwater sample from soil boring B-9 were above the applicable Act 2 standards.

Conclusions

Based on the findings of this Phase II ESA, the arsenic concentration in soil boring B-1 (1.0-2.5 feet) was the only soil parameter to exceed applicable Act 2 MSCs for metals. Cadmium, lead, and manganese were above applicable Act 2 standards in groundwater samples collected from the Site. Volatile organic compounds above applicable Act 2 standards were not detected in any soil or groundwater samples collected. The impacts to site development are as follows:

- During site excavation activities any soils disturbed present an exposure risk to site workers. It is recommended that on-site monitoring be performed and additional health and safety measures be employed during construction activities to address the potential exposure to Site impacts.
- It is recommended that a Soils Management Plan be employed to outline the methods and protocol for the on-site management of excavated materials.

 In the event any groundwater is encountered, additional health and safety measures should be employed during construction activities to address the potential exposure to site workers.

Limitations

The field observations, measurements and sampling reported herein is considered sufficient in detail and scope to form a reasonable basis for a Phase II ESA of the subject property. The investigation, conclusions, and recommendations presented herein are based on the subjective evaluation of limited information (i.e. the information was obtained from individual borings). ACA can only assure that the information presented herein is accurate at the specific boring locations. There is always a potential for other areas on the property to have environmental impacts that were not addressed herein. ACA warrants that the findings and conclusions contained herein have been prepared in conformance with generally accepted Phase II ESA practices.

ACA appreciates the opportunity to be of service to McDonald's USA, LLC. If you have any questions, comments, or require additional information, please feel free to contact the undersigned at (412) 761-1993.

Sincerely,

Michael T. Burke

Geologist

Thomas R. Beatty, P.G.

THE R

President

Attachment List:

Figure 1 Boring Location Map

Table 1 Soil Data Summary (VOCs)
Table 2 Soil Data Summary – Metals

Table 3 Groundwater Data Summary (VOCs)
Table 4 Groundwater Data Summary – Metals

Boring Logs B-1 through B-10

Laboratory Data Report

V. Burke

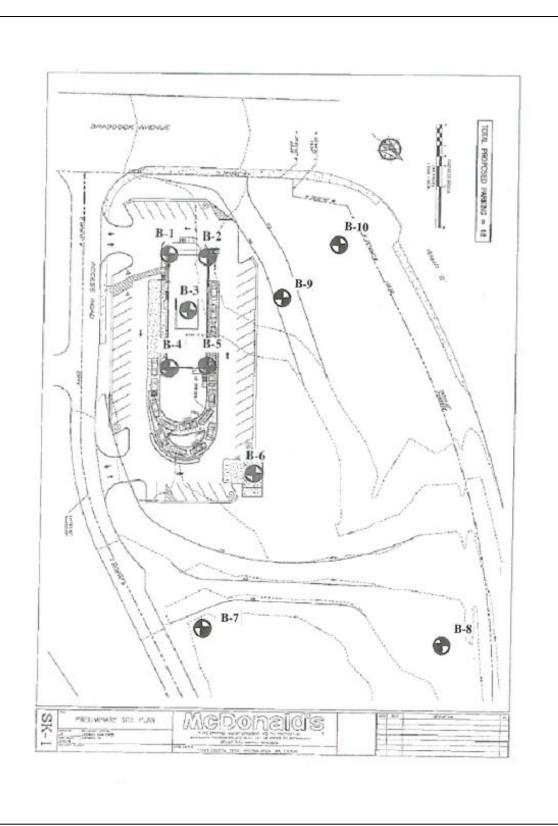


Table 1 Soil Data Summary (VOCs) Edgewood Towne Centre Pittsburgh, Pennsylvania Proposed McDonald's Phase II ESA

			81	82	B3	B4	88	98	B7	88	88	B10	Soil	Soil Vapor
Parameter (1)	Units CAS	CAS	12-13.5'	6-7.5	12-13.5'	6-7.5	3-4.5	13.5-15'	0-1.5	1.5-3'	4.5-6'	1.5-3	Standard (2)	Screening (3)
1,1,1-Trichloroethane	ug/kg	Ė				QN		Q	49.6	Q	Q		20.000	170.000
Acetone	ua/ka	87				43.4		26.3	46.8	182	18.7		000 000 0	110 000 000
Carbon disulfide	ua/ka	12	8			12.7		7.2	S	S	S		620,000	98,000
Trichloroethene	ua/ka	79-01-6				24.2		S	2	S	00		200	000'00
cis-1,2-Dichloroethene	ug/kg	156-59-2	Q	8.1	9	S	S	2	2	Q.	2	2	7 000	7,500

Only Parameters above the detection limits are shown
 The Pennsylvania Act 2 Statewide Health Standard Value for a Non Residential area where groundwater is used
 The Land Recycling Program Technical Guidance Manual- Section IV.A.4- Non-Residential Soil Screening Values ND- Not Detected
 NE- Not Established

Table 2 Soil Data Summary - Metals Phase II ESA Proposed McDonald's Edgewood Towne Centre Pittsburgh, Pennsylvania

			91	83	98	87	88	Soll
Parameter (1)	Units	CAS	1-2.5	1-2.5	0-1.5	0-1.5	0-1.5	Standard (2)
Aluminum	mg/kg	7429-90-5	2,820	18,200	12,000	14,000	11,900	190,000
Antimony	mg/kg	7440-36-0	0.64	0.84	1.0	0.8	S	1,100
Arsenic	mg/kg	7440-38-2	112	37.9	to.	17.9	15.7	23
Barium	mg/kg	7440.39.3	186	952	143	100	169	190,000
Beryllium	mg/kg	7440-41-7	0.39	1.2	0.67	0.92	0.86	5,600
Boron	mg/kg	7440-42-8	8.8	12.7	S	Q	4,	190,000
Cadmium	mg/kg	7440-43-9	0.47	6.8	12	1.6	1.9	1.400
Calcium	mg/kg		352	26,800	2,760	13,600	60,200	NE
Chromium	mg/kg	100000000000000000000000000000000000000	18.9	67.3	23.1	29.3	28.9	R
Cobalt	mg/kg	7440-48-4	20	12.2	8.8	11.1	9.0	840
Copper	mg/kg	7440-50-8	125	110	45.7	61.1	163	100,000
ron	mg/kg	7439-89-6	55,400	48,600	38,300	38,700	25,300	190,000
pea-	mg/kg	7439-92-1	173	183	85.1	91.2	156	1,000
Magneslum	mg/kg		250	2,280	1,570	2,980	2,600	NE
Vanganese	mg/kg	7439-96-5	96.1	2,330	326	1,320	894	130,000
Mercury	gylkgm	7439-97-6	2	0.33	0.13	0.2	0.14	450
Nolybdenum	mg/kg	7439-98-7	2.6	Q	Q	S	Q	14,000
Vickel	6y6m	7440-02-0	6.1	38.6	21.8	58	19.5	56,000
Potassium	Ey/Em		888	2,340	1,160	1,730	1,690	H
Selenium	бубш	7782-49-2	2.8	Q	Q	Q	N	14,000
Silver	бубш	7440-22-4	R	ᄝ	Q Z	2	S	14,000
Sodium	бубш		2	888	2	2	2	W
Challeum	g/gm	7440-28-0	2	Q	2	2	P	200
Vanadium	mg/kg	mg/kg 7440-62-2	19	35.3	25.9	26.4	22.0	20,000
Zinc	mg/kg	mg/kg 7440-66-6	30.1	228	166	102	145	190,000

(1) Only Parameters above the detection limits are shown (ASC) for inorganic Regulated Substances in Soil - Droct Contract Numeric Values - Nonresidential Surface Soil MD - Not Detected Management of the Nort Detected MB - Not Detected Numeric Values - Nortesidential Surface Soil ME - Not Established

Groundwater Data Summary (VOCs) Phase 2 ESA Edgewood Towne Centre Pittsburgh, Pennsylvania Proposed McDonald's Table 3

					Groundwater MSC
Parameter (1)	Units	CAS	B8	B9	Non Residential/used aquifer (2)
Bromoethane	ug/L	74-83-9	1.9	QV	10

(1) Only Parameters above the detection limits are shown (2) The Pennsylvania Act 2 Statewide Health Standard Value for a Non Residential area where groundwater is used ND - Not Detected (NA) Not Applicable

Table 4 Groundwater Data Summary - Metals Proposed McDonald's Edgewood Towne Centre Pittsburgh, Pennsylvania Phase II ESA

Darmandar (4)	Toda	040	ä	od	Groundwater Standard (2)
rarameter (1)	OURS	cvo	000	en	Stelliger (4)
Aluminum	Ng/L	7429-90-5	642	132	NE
Antimony	ug/L	7440-36-0	S	Q	9
Arsenio	ug/L	7440-38-2	S	Q	0
Barium	ug/L	7440-39-3	89.3	91.1	2,000
Beryllum	Ug/L	7440 41 7	Q	QN	*
Boron	ug/L	7440-42-8	164	330	6,000
Cadmium	ug/L	7440-43-9	Q	6,3	10
Calcium	ug/L		116,000	214,000	NE
Chromium	ug/L		QN	QN	100
Cobalt	ug/L	7440-48-4	5.5	90	31
Copper	ug/L	7440-50-8	Q	9.2	1,000
Iron	Ug/L	7439-89-6	391	340	NE
Lead	Ug/L	7439-92-1	Q	15.2	10
Magnesium	ug/L		19,300	39,000	NE
Manganese	UQ/L	7439-96-5	7,600	2,290	300
Mercury	Ug/L	7439-97-6	QN	QN	2
Molybdenum	Ug/L	7439-98-7	Q	Q	40
Nickel	UQ/L	7440-02-0	Q	27.8	100
Potassium	Ug/L		4,920	7,640	Ä
Selenium	Ug/L	7782-49-2	QN	Q	8
Silver	ng/L	7440-22-4	Q	8	100
Sodium	ng/L	0.0000000000000000000000000000000000000	9,640	82,800	H
Thalfum	ng/L	7440-28-0	Q	Q	2
Vanadium	ng/L	7440-62-2	Q	g	720
Zinc	Ug/L	7440-66-6	QN	14.2	2.000

(1) Only Parameters above the detection limits are shown (MSC) for Inorganic (2) The Pennsylvania Act 2 Medium-Specific Concentration (MSC) for Inorganic Regulated Substances in Groundwater - Non-residential used aquifier ND - Not Detected NB - Not Established

Project: McDonald's Restaurant

Client: McDonald's USA, LLC

Location: Edgewood, PA

Elevation: 860' +/-



Engineer/Geologist: M. Burke

ACA ENGINEERING

301	BSURFACE PROFILE	_			SAMPLE		
Symbol	Description	Depth	Number	Type	Sample Depth	DIA	Remarks
0	Ground Surface						
10010	ASPHALT 4"	0.0					
1 11 11	2A SUBBASE 8"	1.0					
2-	Brown CLAY with little sand and gravel (FILL)	1.8	S-1	SS	1.0 - 2.5	564	Moist
3 4 5	Black SAND and GRAVEL with some sit (FILL)		S-2	SS	3.0 - 4.5	462	Moist
6 7 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	Brown, sandy CLAY (FILL) Brick and wood fragments from 6.0 - 6.6	6.0	S-3	SS	6.0 - 7.5	380	Moist
9 0 1	Brown, clayey SILT with sand, gravel, and brick fragments (FILL)	9.0	S-4	SS	9.0 - 10.5	754	Moist
2 3 4	Brown, clayey SILT with sand, gravel, brick, slag, and wood fragments (FILL)	12.0	S-5	SS	12.0 - 13.5	1102	Moist
5 6	Black, silty SAND with	15.0	S-6	SS	15.0 - 16.5	226	Dry
8 9	slag (FILL)	20.0	S-7	SS	18.5 - 20.0	194	Dry 0 HR: Dry

Drilled By: Test Boring Services, Inc.

Drill Method: Hollow Stem Auger

Drill Date: 4/8/13

ACA Engineering, Inc. 40 Western Avenue Pittsburgh, PA 15202

Phone: (412) 761-1990 Fax: (412) 761-1998

Hole Size: 7"

Weather: Clear-60's

Project: McDonald's Restaurant

Client: McDonald's USA, LLC

Location: Edgewood, PA

Elevation: 860' +/-



Engineer/Geologist: M. Burke

ACA
ENGINEERING

_	SUE	SURFACE PROFILE				SAMPLE		
Depth	Symbol	Description	Depth	Number	Type	Sample Depth	Old Old	Remarks
0		Ground Surface	ty and the					
		TOPSOIL 4"	0.0					
2-		Brown, silty CLAY with organics, little sand, and little gravel (FILL		S-1	SS	0.0 - 1.5	1.7	Moist
		organics, some sand.	3.0	S-2	SS	3.0 - 4.5	15.9	Moist
6	22							
7		Brown, clayey SILT with some sand and some gravel (FILL)	6.0	S-3	SS	6.0 - 7.5	32.7	Moist
9	22		9.0					
10			9.0	S-4	SS	9.0 - 10.5	16.6	Moist
12-	30.50	Brown, clayey SILT with slag, glass, rock fragments, some sand and some gravel (FILL)		S-5	SS	400 405	00.0	
13		3		5-5	22	12.0 - 13.5	20.3	Moist
14				S-6	SS	13.5 - 15.0	28.0	Moist
16-		End of Test Boring	15.0					0 HRDry
-								
17-								
18								
19								
20-								

Drilled By: Test Boring Services, Inc.

Drill Method: Hollow Stem Auger

Drill Date: 4/8/13

ACA Engineering, Inc. 40 Western Avenue Pittsburgh, PA 15202 Phone: (412) 761-1990

Fax: (412) 761-1998

Hole Size: 7"

Weather: Clear-60's

Project: McDonald's Restaurant

Client: McDonald's USA, LLC

Location: Edgewood, PA

Elevation: 860' +/-



Engineer/Geologist: M. Burke

ACA ENGINEERING

	SUE	SURFACE PROFILE				SAMPLE		
Depth	Symbol	Description	Depth	Number	Type	Sample Depth	OIA	Remarks
0		Ground Surface						
~	2.22	ASPHALT 4*	0.0	0.4	-00	00.45	11221211	
1-	9135	2A SUBBASE 8"	1.0	S-1	SS	0.0 - 1.5	38.6	
2		Brown, clayey SILT with trace sand and trace gravel (FILL)	2532					Moist
5		Brown, clayey StLT with some sand, some gravel, and little coal fragments (FILL)	3.0	S-2	SS	3.0 - 4.5	66.8	Moist
7	1. (1.	Brown, clayey SILT with some sand, some gravel, little coal fragments, and little rock fragments (FILL)	6.0	S-3	SS	6.0 - 7.5	10.1	Moist
		Brown, clayey SILT with some sand, some gravel, little coal fragments, little rock fragments, and little	9.0	S-4	SS	9.0 - 10.5	13.6	Moist
13-		slag (FILL)		S-5	SS	12.0 - 13.3	99.2	Moist
14	ale ale	Red SLAG with little clay and little silt (FILL)	13.5	S-6	SS	13.5 - 15.0	12.6	Dry
16		End of Test Boring	15.0					0 HRDry
19=								

Drilled By: Test Boring Services, Inc.

Drill Method: Hollow Stem Auger

Drill Date: 4/8/13

ACA Engineering, Inc. 40 Western Avenue Pittsburgh, PA 15202 Phone: (412) 761-1990

Fax: (412) 761-1998

Hole Size: 7"

Weather: Clear-60's

Project: McDonald's Restaurant

Client: McDonald's USA, LLC

Location: Edgewood, PA

Elevation: 860' +/-



ACA ENGINEERING

5	SUBS	URFACE PROFILE				SAMPLE		
Depth	Symbol	Description	Depth	Number	Туре	Sample Depth	OIA	Remarks
0		Ground Surface						
100	B sx	SPHALT 5" A SUBBASE 7" rown, clayey SILT with ome sand and some	1.0	S-1	SS	0.0 - 1.5	13.8	Moist
3 4 5	91	ravel (FILL)	3.0	S-2	SS	3.0 - 4.5	68.4	Moist
6- 7- 8-	SC SC	rown, clayey SILT with ome sand, some gravel, nd little slag (FILL)		S-3	SS	6.0 - 7.3	82.0	Dry
9	so ar	rown, clayey SILT with ome sand, some gravel, and little concrete agments (FILL)	9.0	S-4	SS	9.0 - 10.5	48.6	Moist
12-11	CC	rown, clayey SILT with procrete fragments and ag	12.0	S-5	SS	12.0 - 13.3	48.0	Moist
4	Br tra	rown, clayey SILT with ace slag (FILL)	13.5	S-6	SS	13.5 - 14.9	13.4	Moist
16		End of Test Boring	14.9					0 HRDry

Drilled By: Test Boring Services, Inc.

Drill Method: Hollow Stem Auger

Drill Date: 4/8/13

ACA Engineering, Inc. 40 Western Avenue Pittsburgh, PA 15202

Phone: (412) 761-1990 Fax: (412) 761-1998 Hole Size: 7"

Weather: Clear-60's

Project: McDonald's Restaurant

Client: McDonald's USA, LLC

Location: Edgewood, PA

Elevation: 860' +/-



Engineer/Geologist: M. Burke

ACA ENGINEERING

			_	1	SAMPLE	1	
Symbol	Description	Depth	Number	Type	Sample Depth	Old	Remarks
	Ground Surface						
.,,,	TOPSOIL 4*	0.0					
	Brown, clayey SILT with little sand, little gravel, and trace organics (FILL)		S-1	SS	0.0 - 1.5	17.4	Moist
	Brown, clayey SILT with little sand and little gravel (FILL)	3.0	S-2	SS	3.0 - 4.5	81,1	Moist
		6.0					
	3	- AMERICA O	S-3	SS	6.0 - 7.5	78.2	Moist
	Brown, clayey SILT with little sand, little gravel, and trace slag (FILL)		S-4	ss	9.0 - 10.5	14.7	Moist 24HR10.9
		12.0					
	Brown, clayey SILT with		S-5	SS	12.0 - 13.5	54.8	Moist
	and little slag (FILL)		S-6	ss	13.5 - 15.0	35.6	Moist
	End of Test Boring	15.0					
The same of the sa		Ground Surface TOPSOIL 4* Brown, clayey SILT with little sand, little gravel, and trace organics (FILL) Brown, clayey SILT with little sand and little gravel (FILL) Brown, clayey SILT with little sand, little gravel, and trace slag (FILL) Brown, clayey SILT with little sand, little gravel, and little slag (FILL)	Ground Surface TOPSOIL 4* Brown, clayey SILT with little sand, little gravel, and trace organics (FILL) Brown, clayey SILT with little sand and little gravel (FILL) 6.0 Brown, clayey SILT with little sand, little gravel, and trace slag (FILL) Brown, clayey SILT with little sand, little gravel, and little sand, little gravel, and little slag (FILL)	Ground Surface TOPSOIL 4* Brown, clayey SILT with little sand, little gravel, and trace organics (FILL) Brown, clayey SILT with little sand and little gravel (FILL) G.0 S-2 Brown, clayey SILT with little sand, little gravel, and trace slag (FILL) Brown, clayey SILT with little sand, little gravel, and little slag (FILL) S-5 Brown, clayey SILT with little sand, little gravel, and little slag (FILL) S-6	Ground Surface TOPSOIL 4* Brown, clayey SILT with little sand, little gravel, and trace organics (FILL) Brown, clayey SILT with little sand and little gravel (FILL) Brown, clayey SILT with little sand, little gravel, and trace slag (FILL) Brown, clayey SILT with little sand, little gravel, and trace slag (FILL) Brown, clayey SILT with little sand, little gravel, and little slag (FILL) S-6 SS	Ground Surface TOPSOIL 4* Brown, clayey SILT with little sand, little gravel, and trace organics (FILL) Brown, clayey SILT with little sand and little gravel (FILL) 6.0 S-3 SS 6.0 - 7.5 Brown, clayey SILT with little sand, little gravel, and trace slag (FILL) S-4 SS 9.0 - 10.5 Brown, clayey SILT with little sand, little gravel, and little slag (FILL) S-5 SS 12.0 - 13.5 In the gravel, and little slag (FILL) S-6 SS 13.5 - 15.0	Ground Surface TOPSOIL 4" 0.0 S-1 SS 0.0 - 1.5 17.4

Drilled By: Test Boring Services, Inc.

Drill Method: Hollow Stem Auger

Drill Date: 4/8/13

ACA Engineering, Inc. 40 Western Avenue Pittsburgh, PA 15202

Phone: (412) 761-1990 Fax: (412) 761-1998

Hole Size: 7*

Weather: Clear-60's

Project: McDonald's Restaurant

Client: McDonald's USA, LLC

Location: Edgewood, PA

Elevation: 860' +/-



ACA Engineer/Geologist: M. Burke ENGINEERING

	SUE	SURFACE PROFILE				SAMPLE		
Depth	Symbol	Description	Depth	Number	Туре	Sample Depth	PID	Remarks
0		Ground Surface	LUZBELOS					
=	200	TOPSOIL 4"	0.0	S-1	SS	0.0 - 1.5	40.0	Moist
2		Brown, clayey SILT with little sand, little gravel, and trace organics (FILL)		3-1	33	0.0 - 1.5	12.3	Worst
3 4 5			3.0	S-2	SS	3.0 - 4.5	7.4	Moist
6 7 8		Brown, clayey SILT with little sand and little gravel (FILL)		S-3	SS	6.0 - 7.5	2.7	Moist
10		Brown, clayey SILT with little, sand, little gravel, little slag, and little coal fragments (FILL)	9.0	S-4	SS	9.0 - 10.5	3.9	Moist
12		Brown, clayey SILT with little, sand, little gravel, little slag, little coal	12.0	S-5	SS	12.0 - 13.5	14.9	Moist
14-		fragments, trace cinders, and trace rock fragments (FILL)	15.0	S-6	SS	13.5 - 15.0	18.4	Moist 0 HRDry
16		End of Test Boring	70,0					
17-								
18								
3								
=								
18- 19- 20-								

Drilled By: Test Boring Services, Inc.

Drill Method: Hollow Stem Auger

Drill Date: 4/8/13

ACA Engineering, Inc. 40 Western Avenue Pittsburgh, PA 15202

Phone: (412) 761-1990 Fax: (412) 761-1998 Hole Size: 7"

Weather: Clear-60's

Project: McDonald's Restaurant

Client: McDonald's USA, LLC

Location: Edgewood, PA

Elevation: 890' +/-



Engineer/Geologist: M. Burke

ACA ENGINEERING

SU	BSURFACE PROFILE	1			SAMPLE		
Symbol	Description	Depth	Number	Type	Sample Depth	OIA	Remarks
0	Ground Surface	05.0500					
1 =	TOPSOIL 5*	0.0	S-1	SS	0.0 - 1.5	7.4	Moist
3	Stiff, brown SILT (ML)		S-2	SS	1.5 - 3.0	1.7	Moist
4		4.3	S-3	SS	3.0 - 4.5	8.0	Moist
6	Loose to medium, brown, silty SAND (SM)	4.3	S-4	SS	4.5 - 6.0	0.9	Moist
7-			S-5	SS	6.0 - 7.5	2.6	Moist Dry
8 9	White, moderately weathered SANDSTONE Auger refusal @ 8'	7.5 8.0	S-6	SS	7.5 - 7.9		O.HRDry
11 2 3 4 4 5 6 6 7 8 8	End of Test Boring						

Drilled By: Test Boring Services, Inc.

Drill Method: Hollow Stem Auger

Drill Date: 4/8/13

ACA Engineering, Inc. 40 Western Avenue Pittsburgh, PA 15202

Phone: (412) 761-1990 Fax: (412) 761-1998

Hole Size: 7"

Weather: Clear-60's

Project: McDonald's Restaurant

Client: McDonald's USA, LLC

Location: Edgewood, PA

Elevation: 880' +/-



Engineer/Geologist: M. Burke

ACA ENGINEERING

_	SUE	SURFACE PROFILE				SAMPLE		
Depth	Symbol	Description	Depth	Number	Type	Sample Depth	Old	Remarks
0		Ground Surface						
- 2		Brown, clayey SILT with	0.0	S-1	SS	0.0 - 1.5	1.4	Moist
3		some sand and some gravel (FILL)	1.5	S-2	ss	1.5 - 3.0	6.6	Moist
4		Brown, clayey SILT with some sand, some gravel,		S-3	ss	3.0 - 4.5	4.4	Moist
5		and little rock fragments (FILL)		S-4	SS	4.5 - 6.0		
-				S-5	SS	6.0 - 7.5	0.7	Moist
8		Brown, clayey SILT with some sand, some gravel,	7.5	S-6	SS	7.5 - 9.0	1.3	Wet
10-		little coal fragments, and little cinders (FILL)		S-7	SS	9.0 - 10.5		
11-		Brown, clayey SILT with some sand, some gravel, and little rock fragments	10.5	S-8	SS	10.5 = 12.0	3.2	Wet
13-		(FILL) Brown SILT with iron	12.0	S-9	SS	12.0 - 13.5	0.0	Moist
14-		Staining (FILL) Gray, clayey SILT with trace sand and gravel (FILL)	13.5	S-10	SS	13.5 - 15.0	0.0	Dry 0 HR. Dry
16		End of Test Boring						
17-								
19-								
20=								

Drilled By: Test Boring Services, Inc.

Drill Method: Hollow Stem Auger

Drill Date: 4/8/13

ACA Engineering, Inc. 40 Western Avenue Pittsburgh, PA 15202

Phone: (412) 761-1990 Fax: (412) 761-1998

Hole Size: 7"

Weather: Clear-60's

Project: McDonald's Restaurant

Client: McDonald's USA, LLC Location: Edgewood, PA

Elevation: 850' +/-



Engineer/Geologist: M. Burke



	SUE	SURFACE PROFILE	_			SAMPLE		
Depth	Symbol	Description	Depth	Number	Type	Sample Depth	Old	Remarks
0		Ground Surface						
1-		TOPSOIL 4" Brown, clayey SILT with	0.0	S-1	ss	0.0 - 1.5	516	Moist
2-		little sand, little gravel, and little organics (FILL)		S-2	SS	1.5 - 3.0	567	Moist
3-		Brown, clayey SILT with little sand, little gravel, little organics, and little	3.0	S-3	SS	3.0 - 4 <mark>.</mark> 5	117	Moist
5		\slag (FILL) Brown, clayey SILT with	4.5	S-4	SS	4.5 - 6.0	737	Moist
7		little sand, little gravel, little organics, little slag, little rock fragments, and	6.0	S-5	SS	6.0 - 7.5	24.7	Moist
8		little brick fragments (FILL)	7.5	S-6	ss	7.5 - 9.0	53	Dry
10		Brown, clayey SILT with little sand, little gravel, little organics, little slag, and little rock fragments (FILL)	9.0	S-7	SS	9.0 - 10.5	191	Moist
12		SLAG and FIRE BRICK (FILL)	12.0	S-8	SS	10.5 - 12.0		
13		Brown, clayey SILT with	12.0	S-9	ss	12.0 - 13.5	1.7	Dry 0 HR13.9
14-		White ROCK FRAGMENTS (FILL)		S-10	ss	13.5 - 15.0	16.9	Dry
16		End of Test Boring	15.0					
17								
18								
19-								

Drilled By: Test Boring Services, Inc.

Drill Method: Hollow Stem Auger

Drill Date: 4/9/13

ACA Engineering, Inc. 40 Western Avenue Pittsburgh, PA 15202 Phone: (412) 761-1990

Fax: (412) 761-1998

Hole Size: 7"

Weather: Clear-60's

Project: McDonald's Restaurant

Client: McDonald's USA, LLC

Location: Edgewood, PA

Elevation: 850' +/-



Engineer/Geologist: M. Burke

ENGINEERING

	SUE	BSURFACE PROFILE	_			SAMPLE		
Depth	Description	Depth	Number	Туре	Sample Depth	Ol Ol	Remarks	
0		Ground Surface						
-		TOPSOIL 4"	0.0	S-1	ss	0.0 - 1.5	198	Moist
1-		Brown, clayey SILT with		0-1	00	0.0 - 1.5	190	MOISE
2-		little sand and little gravel (FILL)	1.5	0.0	00	45.00	0.47	- Marian
3		Brown, clayey SILT with	1	S-2	SS	1.5 - 3.0	247	Moist
3		little sand, little gravel,						
4-		and little slag (FILL)		S-3	SS	3.0 - 4.5	32.9	Moist
5-		Brown, clayey SILT with	4.5					
		sandstone stringers (FILL)		S-4	SS	4.5 - 6.0	23.3	Moist
6			6.0	No.	02			
7-		Olive, moderately weathered SANDSTONE		S-5	SS	6.0 - 7.5	12.7	Dry
8			7.0	S-6	SS	7.5 - 7.9		Dry
-		End of Test Boring	7.9					0 HRDry
9-								
10-		9.						
11-								
-								
12-								
13								
-								
14-								
15-								
16-								
2								
17-								
18							1	
19								
=					*			
20-				1				

Drilled By: Test Boring Services, Inc.

Drill Method: Hollow Stem Auger

Drill Date: 4/9/13

ACA Engineering, Inc. 40 Western Avenue Pittsburgh, PA 15202

Phone: (412) 761-1990 Fax: (412) 761-1998

Hole Size: 7"

Weather: Clear-60's



April 24, 2013

Mike Burke ACA Engineering 40 Western Ave Pittsburgh, PA 15202

RE: Project: McDonalds Edgewood Pace Project No.: 3091547

Dear Mike Burke:

Enclosed are the analytical results for sample(s) received by the laboratory on April 10, 2013. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Timothy Reed

timothy.reed@pacelabs.com Project Manager

Enclosures





CERTIFICATIONS

McDonalds Edgewood Project:

Pace Project No.: 3091547

Pennsylvania Certification IDs

6111638 Roseytown Rd Sultes 2,384 Greensburg, PA 15601 ACLASS DOD-ELAP Accreditation #: ADE-1544 Alabama Certification #: 41590

Arizona Certification #: AZ0734 Arkansas Certification California/TNI Certification #: 04222CA Colorado Certification Connectout Certification #: PH-0694 Delaware Certification #: E87683 Guam/PADEP Certification Hawall/PADEP Certification

Idaho Certification Illinois/PADEP Certification Indiana/PADEP Certification lowa Certification #: 391

kansas/Thi Certification #: E-10358 Kentucky Certification #: E-10358 Kentucky Certification #: 90133 Louislana/Thi Certification #: 4086 Maine Certification #: PA0091

Maryland Certification #: 308 Massachusetts Certification #: M-PA1457

Michigan/PADEP Certification Missouri Certification #: 235 Montana Certification #: Cert 0082 Nevada Certification New Hampshire/TNI Certification #: 2976 New Jersey/TNI Certification #: PA 051 New Mexico Certification New York/TNI Certification #: 10888 New York/Thi Certification #, 10886 North Carolina Certification #, 42706 Oregon/Thi Certification #, PA200002 Pennsylvania/Thi Certification #, 65-00282 Puerto Rico Certification #, PA01457

South Dakota Certification Tennessee Certification #: TN2867 Texas/TNI Certification #: T104704188 Utah/TNI Certification #: ANTE Virgin Island/PADEP Certification Virginia/VELAP Certification #: 460198 Washington Certification #: 6868 West Virginia Certification #: 143 Wisconsin/PADEP Certification Wyoming Certification #: 8TMS-Q



ANALYTICAL RESULTS

Project: McDonalds Edgewood

Pace Project No.: 3091547

Sample: B1 12-13.5	Lab ID: 3091547001	Collected: 04/08/	13 09:25	Received: 0	14/10/13 13:50	Matrix: Solid	
Results reported on a "dry-weigh							
Parameters	Results Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qua
3260 MSV 5030 Low Level	Analytical Method: EPA	8260					
Acetone	41.9 ug/kg	10.0	1		04/15/13 13:1:	2 67-64-1	
Benzene	ND ug/kg	5.0	1		04/15/13 13:1	2 71-43-2	
Bromodichioromethane	ND ug/kg	5.0	1		04/15/13 13:1:	2 75-27-4	
Bromoform	ND ug/kg	5.0	1		04/15/13 13:1	2 75-25-2	
Bromomethane	ND ug/kg	5.0	1		04/15/13 13:1	2 74-83-9	
TOTAL BTEX	ND ug/kg	30.1	1		04/15/13 13:1:	2	
2-Butanone (MEK)	ND ug/kg	10.0	1		04/15/13 13:1	2 78-93-3	
Carbon disulfide	ND ug/kg	5.0	1		04/15/13 13:1	2 75-15-0	
Carbon tetrachloride	ND ug/kg	5.0	1		04/15/13 13:1:	2 56-23-5	
Chlorobenzene	ND ug/kg	5.0	1		04/15/13 13:1	2 108-90-7	
Chloroethane	ND ug/kg	5.0	1		04/15/13 13:1:	2 75-00-3	
Chloroform	ND ug/kg	5.0	1		04/15/13 13:1:	2 67-66-3	
Chloromethane	ND ug/kg	5.0	1		04/15/13 13:1	2 74-87-3	
Dibromochioromethane	ND ug/kg	5.0	1		04/15/13 13:1:	2 124-48-1	
1.2-Dichlorobenzene	ND ug/kg	5.0	1		04/15/13 13:1	2 95-50-1	
1.3-Dichlorobenzene	ND ug/kg	5.0	1		04/15/13 13:1	2 541-73-1	
1.4-Dichiorobenzene	ND ug/kg	5.0	1		04/15/13 13:1	2 106-46-7	
1.1-Dichloroethane	ND ug/kg	5.0	1		04/15/13 13:1		
1.2-Dichloroethane	ND ug/kg	5.0	1		04/15/13 13:1		
1,2-Dichloroethene (Total)	ND ug/kg	10.0	1		04/15/13 13:1		
1.1-Dichloroethene	ND ug/kg	5.0	1		04/15/13 13:1		
cis-1.2-Dichioroethene	ND ug/kg	5.0	1		04/15/13 13:1	2 156-59-2	
trans-1.2-Dichloroethene	ND ug/kg	5.0	1		04/15/13 13:1		
1.2-Dichioropropane	ND ug/kg	5.0	1		04/15/13 13:1		
cis-1,3-Dichioropropene	ND ug/kg	5.0	i			2 10061-01-5	
trans-1.3-Dichloropropene	ND ug/kg	5.0	1			2 10061-02-6	
Ethylbenzene	ND ug/kg	5.0	1		04/15/13 13:1		
2-Hexanone	ND ug/kg	10.0	i		04/15/13 13:1		
Methylene Chloride	ND ug/kg	5.0	i		04/15/13 13:1		
4-Methyl-2-pentanone (MIBK)	ND ug/kg	10.0	1		04/15/13 13:1		
Methyl-tert-butyl ether	ND ug/kg	5.0	i		04/15/13 13:1		
Styrene	ND ug/kg	5.0	- 1		04/15/13 13:1		
1.1.2.2-Tetrachioroethane	ND ug/kg	5.0	- 1		04/15/13 13:1		
Tetrachioroethene		5.0	i		04/15/13 13:1		
Toluene	ND ug/kg	5.0	1		04/15/13 13:1		
rowene 1.1.1-Trichioroethane	ND ug/kg	5.0	1		04/15/13 13:1:		
1,1,1-monoroemane 1.1.2-Trichioroethane	ND ug/kg	5.0	1		04/15/13 13:1		
	ND ug/kg	5.0	1				
Trichioroethene	ND ug/kg	5.0	1		04/15/13 13:1:		
Vinyl chloride	ND ug/kg		1				
Xylene (Total)	ND ug/kg	15.0			04/15/13 13:1:		
m&p-Xylene	ND ug/kg	10.0	1			2 179601-23-1	
0-Xylene Surroganes	ND ug/kg	5.0	1		04/15/13 13:1:	2 95-47-6	

1,2-Dichloroethane-d4 (S)

Date: 04/24/2013 04:54 PM

Surrogates

Toluene-d8 (S) 4-Bromofluorobenzene (S)

REPORT OF LABORATORY ANALYSIS

70-130 1

100 %

113 %

115 %

70-130 1 04/15/13 13:12 2037-26-5 70-130 1 04/15/13 13:12 460-00-4

04/15/13 13:12 17060-07-0

Page 3 of 51

This report shall not be reproduced, except in full, without the written consent of Pace Analytical Services, inc..



ANALYTICAL RESULTS

Project: McDonalds Edgewood

Pace Project No.: 3091547

Sample: B1 12-13.5 Lab ID: 3091547001 Collected: 04/08/13 09:25 Received: 04/10/13 13:50 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters Results Units Report Limit DF Prepared Analyzed CAS No. Qual

Percent Moisture Analytical Method: ASTM D2974-87

Percent Moisture 12.3 % 0.10 1 04/18/13 17:13

Date: 04/24/2013 04:54 PM

REPORT OF LABORATORY ANALYSIS

Page 4 of 51



ANALYTICAL RESULTS

Project: McDonalds Edgewood

Pace Project No.: 3091547

Sample: B2 6-7.5 Lab ID: 3091547002 Collected: 04/08/13 10:40 Received: 04/10/13 13:50 Matrix: Solid Results reported on a "dry-weight" basis Parameters Results Units Report Limit DF Prepared Analyzed CAS No. Qual 8260 MSV 5030 Low Level Analytical Method: EPA 8260 34.4 ug/kg 10.4 04/15/13 13:36 67-64-1 Acetone 1 04/15/13 13:36 71-43-2 Benzene ND ug/kg 5.2 1 Bromodichloromethane ND ug/kg 5.2 04/15/13 13:36 75-27-4 1 Bromoform ND ug/kg 04/15/13 13:36 75-25-2 5.2 1 Bromomethane ND ug/kg 5.2 1 04/15/13 13:36 74-83-9 TOTAL BTEX ND ug/kg 31.1 04/15/13 13:36 2-Butanone (MEK) 04/15/13 13:36 78-93-3 ND ug/kg 10.4 1 Carbon disulfide 6.6 ug/kg 5.2 04/15/13 13:36 75-15-0 Carbon tetrachloride ND ug/kg 04/15/13 13:36 56-23-5 ND ug/kg Chlorobenzene 5.2 04/15/13 13:36 108-90-7 Chloroethane ND ug/kg 5.2 1 04/15/13 13:36 75-00-3 Chloroform ND ug/kg 5.2 1 04/15/13 13:36 67-66-3 ND ug/kg 04/15/13 13:36 74-87-3 Chloromethane 5.2 1 Dibromochioromethane ND ug/kg 5.2 04/15/13 13:36 124-48-1 1 04/15/13 13:36 95-50-1 1.2-Dichlorobenzene ND ug/kg 5.2 1 1.3-Dichlorobenzene ND ug/kg 5.2 1 04/15/13 13:36 541-73-1 1,4-Dichlorobenzene ND ug/kg 5.2 04/15/13 13:36 106-46-7 1,1-Dichloroethane ND ug/kg 5.2 1 04/15/13 13:36 75-34-3 1.2-Dichloroethane ND ug/kg 5.2 1 04/15/13 13:36 107-06-2 1,2-Dichloroethene (Total) ND ug/kg 10.4 04/15/13 13:36 540-59-0 1,1-Dichloroethene ND ug/kg 5.2 04/15/13 13:36 75-35-4 cis-1,2-Dichloroethene 8.1 ug/kg 04/15/13 13:36 156-59-2 trans-1,2-Dichloroethene ND ug/kg 5.2 04/15/13 13:36 156-60-5 1 04/15/13 13:36 78-87-5 1,2-Dichloropropane ND ug/kg 5.2 1 cis-1,3-Dichloropropene ND ug/kg 5.2 04/15/13 13:36 10061-01-5 1 trans-1,3-Dichloropropene 04/15/13 13:36 10061-02-6 ND ug/kg 5.2 1 Ethylbenzene ND ug/kg 5.2 1 04/15/13 13:36 100-41-4 2-Hexanone ND ug/kg 10.4 04/15/13 13:36 591-78-6 Methylene Chloride ND ug/kg 5.2 1 04/15/13 13:36 75-09-2 4-Methyl-2-pentanone (MIBK) ND ug/kg 10.4 1 04/15/13 13:36 108-10-1 ND ug/kg Methyl-tert-butyl ether 04/15/13 13:36 1634-04-4 5.2 ND ug/kg Styrene 5.2 04/15/13 13:36 100-42-5 1,1,2,2-Tetrachloroethane ND ug/kg 04/15/13 13:36 79-34-5 5.2 1 Tetrachloroethene ND ug/kg 5.2 04/15/13 13:36 127-18-4 1 04/15/13 13:36 108-88-3 Toluene ND ug/kg 5.2 1 1,1,1-Trichloroethane ND ug/kg 5.2 04/15/13 13:36 71-55-6 1 1.1.2-Trichloroethane 04/15/13 13:36 79-00-5 ND ug/kg 5.2 1 Trichloroethene 16.2 ug/kg 5.2 1 04/15/13 13:36 79-01-6 Vinvi chloride ND ug/kg 5.2 1 04/15/13 13:36 75-01-4 Xylene (Total) ND ug/kg 15.5 1 04/15/13 13:36 1330-20-7 m&p-Xylene ND ug/kg 10.4 1 04/15/13 13:36 179601-23-1 o-Xylene ND ug/kg 04/15/13 13:36 95-47-6 5.2 1 Surrogates

1,2-Dichloroethane-d4 (S)

Date: 04/24/2013 04:54 PM

4-Bromofluorobenzene (S)

Toluene-d8 (S)

REPORT OF LABORATORY ANALYSIS

70-130

70-130

70-130 1

1

95 %

104 %

111 %

Page 5 of 51

04/15/13 13:36 2037-26-5

04/15/13 13:36 460-00-4

04/15/13 13:36 17060-07-0

This report shall not be reproduced, except in full, without the written consent of Pace Analytical Services, inc...



ANALYTICAL RESULTS

Project: McDonalds Edgewood

Pace Project No.: 3091547

Sample: B2 6-7.5 Lab ID: 3091547002 Collected: 04/08/13 10:40 Received: 04/10/13 13:50 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters Results Units Report Limit DF Prepared Analyzed CAS No. Qual

Percent Moisture Analytical Method: ASTM D2974-87

Percent Molsture 13.1 % 0.10 1 04/18/13 17:14

Date: 04/24/2013 04:54 PM

REPORT OF LABORATORY ANALYSIS

Page 6 of 51



ANALYTICAL RESULTS

Project: McDonalds Edgewood

Pace Project No.: 3091547

Sample: B3 12-13.5	Lab ID: 3	091547003 C	ollected: 04/08/	13 11:20	Received: 04	/10/13 13:50	Matrix: Solid	
Results reported on a "dry-weight" t	asis							
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5030 Low Level	Analytical Meth	nod: EPA 8260)					
Acetone	19.1 ug	/kg	12.4	1		04/15/13 14:00	67-64-1	
Benzene	ND ug	/kg	6.2	1		04/15/13 14:00	71-43-2	
Bromodichioromethane	ND ug	/kg	6.2	1		04/15/13 14:00	75-27-4	
Bromoform	ND ug	/kg	6.2	1		04/15/13 14:00	75-25-2	
Bromomethane	ND ug	/kg	6.2	1		04/15/13 14:00	74-83-9	
TOTAL BTEX	ND ug	/kg	37.2	1		04/15/13 14:00		
2-Butanone (MEK)	ND ug	/kg	12.4	1		04/15/13 14:00	78-93-3	
Carbon disulfide	9.1 ug	/kg	6.2	1		04/15/13 14:00	75-15-0	
Carbon tetrachioride	ND ug	-	6.2	1		04/15/13 14:00	56-23-5	
Chlorobenzene	ND ug	-	6.2	1		04/15/13 14:00	108-90-7	
Chloroethane	ND ug	/kg	6.2	1		04/15/13 14:00	75-00-3	
Chioroform	ND ug	-	6.2	1		04/15/13 14:00	67-66-3	
Chioromethane	ND ug	-	6.2	1		04/15/13 14:00	74-87-3	
Dibromochioromethane	ND ug	-	6.2	1		04/15/13 14:00	124-48-1	
1.2-Dichlorobenzene	ND ug	-	6.2	1		04/15/13 14:00	95-50-1	
1.3-Dichlorobenzene	ND ug	-	6.2	1		04/15/13 14:00	541-73-1	
1.4-Dichlorobenzene	ND ug	-	6.2	1		04/15/13 14:00		
1.1-Dichloroethane	ND ug		6.2	i		04/15/13 14:00		
1.2-Dichioroethane	ND ug	-	6.2	- 1		04/15/13 14:00		
1.2-Dichloroethene (Total)	ND ug	-	12.4	i		04/15/13 14:00		
1.1-Dichloroethene	ND ug		6.2	i		04/15/13 14:00		
cis-1.2-Dichioroethene	ND ug	-	6.2	- i		04/15/13 14:00		
trans-1,2-Dichloroethene	ND ug	-	6.2	i		04/15/13 14:00		
1,2-Dichloropropane	ND ug	_	6.2	i		04/15/13 14:00		
cls-1,3-Dichioropropene	ND ug		6.2	1		04/15/13 14:00		
trans-1,3-Dichloropropene	ND ug	-	6.2	i		04/15/13 14:00		
Ethylbenzene	_	-	6.2	i		04/15/13 14:00		
2-Hexanone	ND ug		12.4	i		04/15/13 14:00		
Methylene Chloride	ND ug		6.2	1		04/15/13 14:00		
4-Methyl-2-pentanone (MIBK)	ND ug	-	12.4	1		04/15/13 14:00		
	ND ug	-	6.2					
Methyl-tert-butyl ether Styrene	ND ug		6.2	1		04/15/13 14:00 04/15/13 14:00		
1.1.2.2-Tetrachloroethane	ND ug	-	6.2	1		04/15/13 14:00		
1,	ND ug	-						
Tetrachioroethene	ND ug	-	6.2	1		04/15/13 14:00		
Toluene	ND ug		6.2	1		04/15/13 14:00		
1,1,1-Trichloroethane	ND ug	-	6.2	1		04/15/13 14:00		
1,1,2-Trichloroethane	ND ug		6.2	1		04/15/13 14:00		
Trichioroethene	7.6 ug		6.2	1		04/15/13 14:00		
Vinyl chloride	ND ug		6.2	1		04/15/13 14:00		
Xylene (Total)	ND ug	_	18.6	1		04/15/13 14:00		
m&p-Xylene	ND ug	-	12.4	1		04/15/13 14:00		
o-Xylene	ND ug	/kg	6.2	1		04/15/13 14:00	95-47-6	
Surrogates								
Toluene-d8 (S)	96 %		70-130	1		04/15/13 14:00		
4-Bromofluorobenzene (S)	99 %		70-130	1		04/15/13 14:00		
1,2-Dichloroethane-d4 (S)	116 %		70-130	1		04/15/13 14:00	17060-07-0	

Date: 04/24/2013 04:54 PM

REPORT OF LABORATORY ANALYSIS

Page 7 of 51

This report shall not be reproduced, except in full, without the written consent of Pace Analytical Services, inc..



ANALYTICAL RESULTS

Project: McDonalds Edgewood

Pace Project No.: 3091547

Sample: B3 12-13.5 Lab ID: 3091547003 Collected: 04/08/13 11:20 Received: 04/10/13 13:50 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters Results Units Report Limit DF Prepared Analyzed CAS No. Qual

Percent Moisture Analytical Method: ASTM D2974-87

Percent Moisture 12.8 % 0.10 1 04/18/13 17:14

Date: 04/24/2013 04:54 PM

REPORT OF LABORATORY ANALYSIS

Page 8 of 51



ANALYTICAL RESULTS

Project: McDonalds Edgewood

Pace Project No.: 3091547

Sample: B4 6-7.5	Lab ID: 30	91547004	Collected: 04/08/1	3 11:55	Received: 04	V10/13 13:50 N	//atrix: Solid	
Results reported on a "dry-weig	ht" basis							
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5030 Low Level	Analytical Me	thod: EPA 82	60					
Acetone	43.4 u	g/kg	10	1		04/15/13 14:25	67-64-1	
Benzene	ND u	q/kq	5.0	1		04/15/13 14:25	71-43-2	

8260 MSV 5030 Low Level	Analytical Method: EPA 8260			
	•			
Acetone	43.4 ug/kg	10 5.0	1	04/15/13 14:25 67-64-1
Benzene Bromodichioromethane	ND ug/kg	5.0	1	04/15/13 14:25 71-43-2 04/15/13 14:25 75-27-4
	ND ug/kg		1	
Bromoform	ND ug/kg	5.0		04/15/13 14:25 75-25-2
Bromomethane	ND ug/kg	5.0	1	04/15/13 14:25 74-83-9
TOTAL BTEX	ND ug/kg	29.9	1	04/15/13 14:25
2-Butanone (MEK)	ND ug/kg	10	1	04/15/13 14:25 78-93-3
Carbon disulfide	12.7 ug/kg	5.0	1	04/15/13 14:25 75-15-0
Carbon tetrachloride	ND ug/kg	5.0	1	04/15/13 14:25 56-23-5
Chlorobenzene	ND ug/kg	5.0	1	04/15/13 14:25 108-90-7
Chloroethane	ND ug/kg	5.0	1	04/15/13 14:25 75-00-3
Chloroform	ND ug/kg	5.0	1	04/15/13 14:25 67-66-3
Chloromethane	ND ug/kg	5.0	1	04/15/13 14:25 74-87-3
Dibromochioromethane	ND ug/kg	5.0	1	04/15/13 14:25 124-48-1
1,2-Dichlorobenzene	ND ug/kg	5.0	1	04/15/13 14:25 95-50-1
1,3-Dichlorobenzene	ND ug/kg	5.0	1	04/15/13 14:25 541-73-1
1,4-Dichiorobenzene	ND ug/kg	5.0	1	04/15/13 14:25 106-46-7
1,1-Dichloroethane	ND ug/kg	5.0	1	04/15/13 14:25 75-34-3
1,2-Dichloroethane	ND ug/kg	5.0	1	04/15/13 14:25 107-06-2
1,2-Dichloroethene (Total)	ND ug/kg	10	1	04/15/13 14:25 540-59-0
1,1-Dichloroethene	ND ug/kg	5.0	1	04/15/13 14:25 75-35-4
cis-1,2-Dichloroethene	ND ug/kg	5.0	1	04/15/13 14:25 156-59-2
trans-1,2-Dichloroethene	ND ug/kg	5.0	1	04/15/13 14:25 156-60-5
1,2-Dichloropropane	ND ug/kg	5.0	1	04/15/13 14:25 78-87-5
cls-1,3-Dichloropropene	ND ug/kg	5.0	1	04/15/13 14:25 10061-01-5
trans-1,3-Dichloropropene	ND ug/kg	5.0	1	04/15/13 14:25 10061-02-6
Ethylbenzene	ND ug/kg	5.0	1	04/15/13 14:25 100-41-4
2-Hexanone	ND ug/kg	10	1	04/15/13 14:25 591-78-6
Methylene Chloride	ND ug/kg	5.0	1	04/15/13 14:25 75-09-2
4-Methyl-2-pentanone (MIBK)	ND ug/kg	10	1	04/15/13 14:25 108-10-1
Methyl-tert-butyl ether	ND ug/kg	5.0	1	04/15/13 14:25 1634-04-4
Styrene	ND ug/kg	5.0	1	04/15/13 14:25 100-42-5
1.1.2.2-Tetrachioroethane	ND ug/kg	5.0	1	04/15/13 14:25 79-34-5
Tetrachiomethene	ND ug/kg	5.0	1	04/15/13 14:25 127-18-4
Toluene	ND ug/kg	5.0	1	04/15/13 14:25 108-88-3
1.1.1-Trichioroethane	ND ug/kg	5.0	i	04/15/13 14:25 71-55-6
1.1.2-Trichloroethane	ND ug/kg	5.0	- i	04/15/13 14:25 79:00-5
Trichloroethene	24.2 ug/kg	5.0	- i	04/15/13 14:25 79:01-6
Vinyl chloride	ND ug/kg	5.0	- 1	04/15/13 14:25 75-01-4
Xviene (Total)	ND ug/kg	15.0	i	04/15/13 14:25 1330-20-7
m&p-Xylene	ND ug/kg	10.0	- 1	04/15/13 14:25 179601-23-1
o-Xylene	ND ug/kg	5.0	- 1	04/15/13 14:25 95-47-6
Surrogates	NO uging	5.0		04/13/13 14:23 35-47-0
Toluene-d8 (S)	98 %	70-130	1	04/15/13 14:25 2037-26-5
4-Bromofluorobenzene (S)	115 %	70-130	i	04/15/13 14:25 2657-26-5
1,2-Dichloroethane-d4 (S)	111 %	70-130	i	04/15/13 14:25 17060-07-0
i, E didilordendile de (d)	111 /6	70-130		04/10/10 14:20 17/00/07/0

Date: 04/24/2013 04:54 PM

REPORT OF LABORATORY ANALYSIS

Page 9 of 51

This report shall not be reproduced, except in full, without the written consent of Pace Analytical Services, inc..



ANALYTICAL RESULTS

Project: McDonalds Edgewood

Pace Project No.: 3091547

Sample: B4 6-7.5 Lab ID: 3091547004 Collected: 04/08/13 11:55 Received: 04/10/13 13:50 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters Results Units Report Limit DF Prepared Analyzed CAS No. Qual

Percent Moisture Analytical Method: ASTM D2974-87

Percent Moisture 12.2 % 0.10 1 04/18/13 17:15

Date: 04/24/2013 04:54 PM

REPORT OF LABORATORY ANALYSIS

Page 10 of 51



ANALYTICAL RESULTS

Project: McDonalds Edgewood

Pace Project No.: 3091547

Sample: B5 3-4.5	Lab ID: 30915	47005 Collected: 0	4/08/13 12:55	Received: 0	4/10/13 13:50	Matrix: Solid	
Results reported on a "dry-weigh	t" basis						
Parameters	Results	Units Report L	mit DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5030 Low Level	Analytical Metho	d: EPA 8260					
Acetone	25.1 ug/k	g	8.8 1		04/15/13 14:4	9 67-64-1	
Benzene	ND ug/k	9	4.4 1		04/15/13 14:4	9 71-43-2	
Bromodichioromethane	ND ug/k	g	4.4 1		04/15/13 14:4	9 75-27-4	
Bromoform	ND ug/k	g	4.4 1		04/15/13 14:4	9 75-25-2	
Bromomethane	ND ug/k	9	4.4 1		04/15/13 14:4	9 74-83-9	
TOTAL BTEX	ND ug/k	9	26.3 1		04/15/13 14:4	19	
2-Butanone (MEK)	ND ug/k	g	8.8 1		04/15/13 14:4	9 78-93-3	
Carbon disulfide	ND ug/k	g	4.4 1		04/15/13 14:4	9 75-15-0	
Carbon tetrachloride	ND ug/k	9	4.4 1		04/15/13 14:4	9 56-23-5	
Chlorobenzene	ND ug/k	9	4.4 1		04/15/13 14:4	9 108-90-7	
Chloroethane	ND ug/k	g	4.4 1		04/15/13 14:4	9 75-00-3	
Chloroform	ND ug/k	9	4.4 1		04/15/13 14:4	9 67-66-3	
Chloromethane	ND ug/k	g	4.4 1		04/15/13 14:4	9 74-87-3	
Dibromochioromethane	ND ug/k	9	4.4 1		04/15/13 14:4	9 124-48-1	
1,2-Dichlorobenzene	ND ug/k	g	4.4 1		04/15/13 14:4	9 95-50-1	
1,3-Dichlorobenzene	ND ug/k	g	4.4 1		04/15/13 14:4	9 541-73-1	
1,4-Dichlorobenzene	ND ug/k	q	4.4 1		04/15/13 14:4	9 106-46-7	
1,1-Dichloroethane	ND ug/k	ğ	4.4 1		04/15/13 14:4	9 75-34-3	
1,2-Dichloroethane	ND ug/k	q	4.4 1		04/15/13 14:4	9 107-06-2	
1,2-Dichloroethene (Total)	ND ug/k	q	8.8 1		04/15/13 14:4	9 540-59-0	
1,1-Dichloroethene	ND ug/k	ğ	4.4 1		04/15/13 14:4	9 75-35-4	
cls-1,2-Dichloroethene	ND ug/k	q	4.4 1		04/15/13 14:4	9 156-59-2	
trans-1,2-Dichloroethene	ND ug/k	q	4.4 1		04/15/13 14:4	9 156-60-5	
1,2-Dichioropropane	ND ug/k	a a	4.4 1		04/15/13 14:4	9 78-87-5	
cls-1,3-Dichloropropene	ND ug/k	ğ	4.4 1		04/15/13 14:4	9 10061-01-5	
trans-1,3-Dichloropropene	ND ug/k	q	4.4 1		04/15/13 14:4	9 10061-02-6	
Ethylbenzene	ND ug/k	q	4.4 1		04/15/13 14:4	9 100-41-4	
2-Hexanone	ND ug/k	a a	8.8 1		04/15/13 14:4	9 591-78-6	
Methylene Chloride	ND ug/k		4.4 1		04/15/13 14:4	9 75-09-2	
4-Methyl-2-pentanone (MIBK)	ND ug/k	q	8.8 1		04/15/13 14:4	9 108-10-1	
Methyl-tert-butyl ether	ND ug/k	q	4.4 1		04/15/13 14:4	9 1634-04-4	
Styrene	ND ug/k	ğ	4.4 1		04/15/13 14:4	9 100-42-5	
1,1,2,2-Tetrachioroethane	ND ug/k	q	4.4 1		04/15/13 14:4	9 79-34-5	
Tetrachioroethene	ND ug/k	q	4.4 1		04/15/13 14:4	9 127-18-4	
Toluene	ND ug/k		4.4 1		04/15/13 14:4	9 108-88-3	
1,1,1-Trichioroethane	ND ug/k		4.4 1		04/15/13 14:4	9 71-55-6	
1,1,2-Trichloroethane	ND ug/k	a a	4.4 1		04/15/13 14:4	9 79-00-5	
Trichloroethene	ND ug/k	a a	4.4 1		04/15/13 14:4	9 79-01-6	
Vinyl chloride	ND ug/k		4.4 1		04/15/13 14:4	9 75-01-4	
Xylene (Total)	ND ug/k		13.2 1		04/15/13 14:4	9 1330-20-7	
m&p-Xylene	ND ug/k	-	8.8 1		04/15/13 14:4	9 179601-23-1	
o-Xylene	ND ug/k		4.4 1		04/15/13 14:4	9 95-47-6	
Surrogates		-	-				
Toluene-d8 (S)	98 %	70	-130 1		04/15/13 14:4	9 2037-26-5	
4-Bromofluorobenzene (S)	108 %	70	-130 1		04/15/13 14:4	9 460-00-4	
1,2-Dichloroethane-d4 (S)	117 %	70	130 1		04/15/13 14:4	9 17060-07-0	

Date: 04/24/2013 04:54 PM REPORT OF LABORATORY ANALYSIS

Page 11 of 51

This report shall not be reproduced, except in full, without the written consent of Pace Analytical Services, Inc..



ANALYTICAL RESULTS

Project: McDonalds Edgewood

Pace Project No.: 3091547

Sample: B5 3-4.5 Lab ID: 3091547005 Collected: 04/08/13 12:55 Received: 04/10/13 13:50 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters Results Units Report Limit DF Prepared Analyzed CAS No. Qual

Percent Moisture Analytical Method: ASTM D2974-87

Percent Moisture 15.3 % 0.10 1 04/18/13 17:28

Date: 04/24/2013 04:54 PM

REPORT OF LABORATORY ANALYSIS

Page 12 of 51



ANALYTICAL RESULTS

Project: McDonalds Edgewood

Pace Project No.: 3091547

Sample: B6 13.5-15	Lab ID: 3091547006	Collected: 04/08/13	13:40	Received: 0	4/10/13 13:50	Matrix: Solid	
Results reported on a "dry-weigh							
Parameters	Results Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qua
8260 MSV 5030 Low Level	Analytical Method: EPA 8	8260					
Acetone	26.3 ug/kg	8.9	1		04/15/13 15:13		
Benzene	ND ug/kg	4.5	1		04/15/13 15:13		
Bromodichioromethane	ND ug/kg	4.5	1		04/15/13 15:13		
Bromoform	ND ug/kg	4.5	1		04/15/13 15:13		
Bromomethane	ND ug/kg	4.5	1		04/15/13 15:13	74-83-9	
TOTAL BTEX	ND ug/kg	26.8	1		04/15/13 15:13		
2-Butanone (MEK)	ND ug/kg	8.9	1		04/15/13 15:13	78-93-3	
Carbon disulfide	7.2 ug/kg	4.5	1		04/15/13 15:13	75-15-0	
Carbon tetrachioride	ND ug/kg	4.5	1		04/15/13 15:13	3 56-23-5	
Chlorobenzene	ND ug/kg	4.5	1		04/15/13 15:13	3 108-90-7	
Chloroethane	ND ug/kg	4.5	1		04/15/13 15:13	75-00-3	
Chloroform	ND ug/kg	4.5	1		04/15/13 15:13	67-66-3	
Chloromethane	ND ug/kg	4.5	1		04/15/13 15:13	3 74-87-3	
Dibromochioromethane	ND ug/kg	4.5	1		04/15/13 15:13	124-48-1	
1,2-Dichlorobenzene	ND ug/kg	4.5	1		04/15/13 15:13	95-50-1	
1,3-Dichlorobenzene	ND ug/kg	4.5	1		04/15/13 15:13	3 541-73-1	
1.4-Dichlorobenzene	ND ug/kg	4.5	1		04/15/13 15:13	3 106-46-7	
1,1-Dichloroethane	ND ug/kg	4.5	1		04/15/13 15:13	75-34-3	
1,2-Dichloroethane	ND ug/kg	4.5	1		04/15/13 15:13	3 107-06-2	
1,2-Dichloroethene (Total)	ND ug/kg	8.9	1		04/15/13 15:13	3 540-59-0	
1,1-Dichloroethene	ND ug/kg	4.5	1		04/15/13 15:13	75-35-4	
ds-1,2-Dichloroethene	ND ug/kg	4.5	1		04/15/13 15:13	3 156-59-2	
rans-1.2-Dichloroethene	ND ug/kg	4.5	1		04/15/13 15:13	3 156-60-5	
1,2-Dichloropropane	ND ug/kg	4.5	1		04/15/13 15:13	78-87-5	
cis-1.3-Dichloropropene	ND ug/kg	4.5	1		04/15/13 15:13	10061-01-5	
trans-1,3-Dichloropropene	ND ug/kg	4.5	1		04/15/13 15:13	3 10061-02-6	
Ethylbenzene	ND ug/kg	4.5	1		04/15/13 15:13		
2-Hexanone	ND ug/kg	8.9	i		04/15/13 15:13		
Methylene Chloride	ND ug/kg	4.5	i		04/15/13 15:13		
4-Methyl-2-pentanone (MIBK)	ND ug/kg	8.9	1		04/15/13 15:13		
Methyl-tert-butyl ether	ND ug/kg	4.5	i		04/15/13 15:13		
Styrene	ND ug/kg	4.5	i		04/15/13 15:13		
1,1,2,2-Tetrachioroethane	ND ug/kg	4.5	i		04/15/13 15:13		
Tetrachlomethene	ND ug/kg	4.5	i		04/15/13 15:13		
Toluene	ND ug/kg	4.5	i		04/15/13 15:13		
1,1,1-Trichioroethane	ND ug/kg	4.5	i		04/15/13 15:13		
1.1.2-Trichioroethane	ND ug/kg	4.5	i		04/15/13 15:13		
Trichloroethene	ND ug/kg	4.5	i		04/15/13 15:13		
Vinyl chloride	ND ug/kg	4.5	i		04/15/13 15:13		
Viriyi chloride Xylene (Total)		13.4	1		04/15/13 15:13		
	ND ug/kg		1				
m&p-Xylene	ND ug/kg	8.9	1			3 179601-23-1	
o-Xylene	ND ug/kg	4.5	1		04/15/13 15:13	95-4/-6	
Surrogates Toluene-d8 (S)	94 %	70-130	1		04/15/13 15:13	2 2037-25 5	
rowene-as (S) 4-Bromofluorobenzene (S)	106 %	70-130 70-130	1		04/15/13 15:13		
			1				
1,2-Dichloroethane-d4 (S)	119 %	70-130	1		04/15/13 15:13	1/060-07-0	

Date: 04/24/2013 04:54 PM

REPORT OF LABORATORY ANALYSIS

Page 13 of 51

This report shall not be reproduced, except in full, without the written consent of Pace Analytical Services, inc..



ANALYTICAL RESULTS

Project: McDonalds Edgewood

Pace Project No.: 3091547

Results reported on a "dry-weight" basis

Parameters Results Units Report Limit DF Prepared Analyzed CAS No. Qual

Percent Moisture Analytical Method: ASTM D2974-87

Percent Molsture 15.1 % 0.10 1 04/18/13 17:28

Date: 04/24/2013 04:54 PM

REPORT OF LABORATORY ANALYSIS

Page 14 of 51



ANALYTICAL RESULTS

Project: McDonalds Edgewood

Pace Project No.: 3091547

Sample: B7 0-1.5 Lab ID: 3091547007 Collected: 04/08/13 14:25 Received: 04/10/13 13:50 Matrix: Solid Results reported on a "dry-weight" basis

Parameters Results Units Report Limit DF Prepared Analyzed CAS No. Qu

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5030 Low Level	Analytical Met	hod: EPA 8260	ı					
Acetone	46.6 ug	ı/kg	13.4	1		04/15/13 15:37	67-64-1	
Benzene	ND ug	/kg	6.7	1		04/15/13 15:37	71-43-2	
Bromodichioromethane	ND ug	/kg	6.7	1		04/15/13 15:37	75-27-4	
Bromoform	ND ug	μkg	6.7	1		04/15/13 15:37	75-25-2	
Bromomethane	ND ug	μkg	6.7	1		04/15/13 15:37	74-83-9	
TOTAL BTEX	ND ug	/kg	40.2	1		04/15/13 15:37		
2-Butanone (MEK)	ND ug	νkg	13.4	1		04/15/13 15:37	78-93-3	
Carbon disulfide	ND ug	μkg	6.7	1		04/15/13 15:37	75-15-0	
Carbon tetrachioride	ND ug	/kg	6.7	1		04/15/13 15:37	56-23-5	
Chlorobenzene	ND ug	/kg	6.7	1		04/15/13 15:37	108-90-7	
Chloroethane	ND ug	/kg	6.7	1		04/15/13 15:37	75-00-3	
Chloroform	ND ug	/kg	6.7	1		04/15/13 15:37	67-66-3	
Chloromethane	ND ug	/kg	6.7	1		04/15/13 15:37	74-87-3	
Dibromochloromethane	ND ug	ı/kg	6.7	1		04/15/13 15:37	124-48-1	
1,2-Dichlorobenzene	ND ug	/kg	6.7	1		04/15/13 15:37	95-50-1	
1,3-Dichlorobenzene	ND ug	/kg	6.7	1		04/15/13 15:37	541-73-1	
1,4-Dichlorobenzene	ND ug	/kg	6.7	1		04/15/13 15:37	106-46-7	
1,1-Dichloroethane	ND ug		6.7	1		04/15/13 15:37	75-34-3	
1.2-Dichloroethane	ND ug	_	6.7	1		04/15/13 15:37	107-06-2	
1,2-Dichloroethene (Total)	ND ug	-	13.4	1		04/15/13 15:37	540-59-0	
1,1-Dichloroethene	ND ug	_	6.7	1		04/15/13 15:37	75-35-4	
cls-1.2-Dichloroethene	ND ug	_	6.7	1		04/15/13 15:37	156-59-2	
trans-1.2-Dichloroethene	ND ug		6.7	1		04/15/13 15:37	156-60-5	
1,2-Dichloropropane	ND ug	-	6.7	1		04/15/13 15:37	78-87-5	
cls-1,3-Dichloropropene	ND ug		6.7	1		04/15/13 15:37	10061-01-5	
trans-1.3-Dichloropropene	ND ug	-	6.7	1		04/15/13 15:37	10061-02-6	
Ethylbenzene	ND ug	_	6.7	1		04/15/13 15:37	100-41-4	
2-Hexanone	ND ug		13.4	1		04/15/13 15:37	591-78-6	
Methylene Chloride	ND ug		6.7	1		04/15/13 15:37	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND ug	-	13.4	1		04/15/13 15:37	108-10-1	
Methyl-tert-butyl ether	ND ug	-	6.7	1		04/15/13 15:37	1634-04-4	
Styrene	ND ug	-	6.7	1		04/15/13 15:37	100-42-5	
1.1.2.2-Tetrachioroethane	ND ug	-	6.7	1		04/15/13 15:37	79-34-5	
Tetrachioroethene	ND ug	-	6.7	1		04/15/13 15:37	127-18-4	
Toluene	ND ug	_	6.7	1		04/15/13 15:37		
1.1.1-Trichioroethane	49.6 uq		6.7	1		04/15/13 15:37		
1.1.2-Trichloroethane	ND ug	-	6.7	1		04/15/13 15:37	79-00-5	
Trichioroethene	ND ug	-	6.7	1		04/15/13 15:37		
Vinyl chloride	ND ug	-	6.7	1		04/15/13 15:37		
Xylene (Total)	ND ug		20.1	1		04/15/13 15:37		
m&p-Xylene	ND ug	-	13.4	i		04/15/13 15:37		
o-Xviene	ND ug	-	6.7	i		04/15/13 15:37		
Surrogates	.10 ug	7-9	0.7	•		2410101010.07	20410	
Toluene-d8 (S)	100 %		70-130	1		04/15/13 15:37	2037-26-5	
4-Bromofluorobenzene (S)	112 %		70-130	1		04/15/13 15:37		
1,2-Dichloroethane-d4 (S)	117 %		70-130	1		04/15/13 15:37	17060-07-0	

Date: 04/24/2013 04:54 PM

REPORT OF LABORATORY ANALYSIS

Page 15 of 51

This report shall not be reproduced, except in full, without the written consent of Pace Analytical Services, inc..



ANALYTICAL RESULTS

Project: McDonalds Edgewood

Pace Project No.: 3091547

Sample: B7 0-1.5 Lab ID: 3091547007 Collected: 04/08/13 14:25 Received: 04/10/13 13:50 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters Results Units Report Limit DF Prepared Analyzed CAS No. Qual

Percent Moisture Analytical Method: ASTM D2974-87

Percent Moisture 15.9 % 0.10 1 04/18/13 17:29

Date: 04/24/2013 04:54 PM

REPORT OF LABORATORY ANALYSIS

Page 16 of 51



ANALYTICAL RESULTS

Project: McDonalds Edgewood Pace Project No.: 3091547

Sample: B8 1.5-3 Lab ID: 3091547008 Collected: 04/08/13 15:50 Received: 04/10/13 13:50 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qua
260 MSV 5030 Low Level	Analytical Meth	nod: EPA 8260)					
Acetone	162 ug	/kg	9.2	1		04/15/13 16:02	67-64-1	
Benzene	ND ug	/kg	4.6	1		04/15/13 16:02	71-43-2	
Bromodichioromethane	ND ug	/kg	4.6	1		04/15/13 16:02	75-27-4	
Bromoform	ND ug	/kg	4.6	1		04/15/13 16:02	75-25-2	
Bromomethane	ND ug	/kg	4.6	1		04/15/13 16:02	74-83-9	
TOTAL BTEX	ND ug	/kg	27.5	1		04/15/13 16:02		
2-Butanone (MEK)	ND ug	/kg	9.2	1		04/15/13 16:02	78-93-3	
Carbon disulfide	ND ug	/kg	4.6	1		04/15/13 16:02	75-15-0	
Carbon tetrachioride	ND ug	/kg	4.6	1		04/15/13 16:02	56-23-5	
Chlorobenzene	ND ug	/kg	4.6	1		04/15/13 16:02	108-90-7	
Chloroethane	ND ug	/kg	4.6	1		04/15/13 16:02	75-00-3	
Chloroform	ND ug	/kg	4.6	1		04/15/13 16:02	67-66-3	
Chloromethane	ND ug	/kg	4.6	1		04/15/13 16:02	74-87-3	
Dibromochioromethane	ND ug	/kg	4.6	1		04/15/13 16:02	124-48-1	
,2-Dichlorobenzene	ND ug	/kg	4.6	1		04/15/13 16:02	95-50-1	
.3-Dichlorobenzene	ND ug	/kg	4.6	1		04/15/13 16:02	541-73-1	
.4-Dichlorobenzene	ND ug	-	4.6	1		04/15/13 16:02	106-46-7	
.1-Dichloroethane	ND ug		4.6	1		04/15/13 16:02	75-34-3	
.2-Dichloroethane	ND ug	-	4.6	1		04/15/13 16:02	107-06-2	
.2-Dichloroethene (Total)	ND ug	-	9.2	1		04/15/13 16:02	540-59-0	
.1-Dichloroethene	ND ug		4.6	1		04/15/13 16:02	75-35-4	
is-1.2-Dichloroethene	ND ug	-	4.6	1		04/15/13 16:02	156-59-2	
rans-1.2-Dichloroethene	ND ug	-	4.6	1		04/15/13 16:02	156-60-5	
.2-Dichioropropane	ND ug	-	4.6	1		04/15/13 16:02	78-87-5	
is-1,3-Dichioropropene	ND ug	-	4.6	1		04/15/13 16:02	10061-01-5	
rans-1,3-Dichloropropene	ND ug	_	4.6	1		04/15/13 16:02	10061-02-6	
Ethylbenzene	ND ug	-	4.6	1		04/15/13 16:02	100-41-4	
-Hexanone	ND ug	_	9.2	1		04/15/13 16:02		
lethylene Chloride	ND ug		4.6	i		04/15/13 16:02		
-Methyl-2-pentanone (MIBK)	ND ug	-	9.2	1		04/15/13 16:02	108-10-1	
Methyl-tert-butyl ether	ND ug	_	4.6	1		04/15/13 16:02		
Styrene	ND ug		4.6	i		04/15/13 16:02		
.1.2.2-Tetrachioroethane	ND ug	-	4.6	1		04/15/13 16:02		
etrachioroethene	ND ug	-	4.6	1		04/15/13 16:02		
bluene	ND ug	-	4.6	i		04/15/13 16:02		
.1.1-Trichioroethane	ND ug	-	4.6	i		04/15/13 16:02		
.1.2-Trichloroethane	ND ug	-	4.6	i		04/15/13 16:02		
richioroethene	ND ug	-	4.6	1		04/15/13 16:02		
Inviologiale	ND ug	-	4.6	i		04/15/13 16:02		
(ylene (Total)	ND ug	_	13.8	i		04/15/13 16:02		
n&p-Xylene	ND ug	-	9.2	1		04/15/13 16:02		
nap-xylene ⊢Xvlene	-	-	4.6	1		04/15/13 16:02		
Exylene Surrogates	ND ug	my	4.0			04/13/13 10:02	50-41-0	
foluene-d8 (S)	94 %		70-130	1		04/15/13 16:02	2037-26-5	
I-Bromofluorobenzene (S)	106 %		70-130	1		04/15/13 16:02	460-00-4	

Date: 04/24/2013 04:54 PM

REPORT OF LABORATORY ANALYSIS

Page 17 of 51

This report shall not be reproduced, except in full, without the written consent of Pace Analytical Services, Inc..



ANALYTICAL RESULTS

Project: McDonalds Edgewood

Pace Project No.: 3091547

Sample: B8 1.5-3 Lab ID: 3091547008 Collected: 04/08/13 15:50 Received: 04/10/13 13:50 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters Results Units Report Limit DF Prepared Analyzed CAS No. Qual

Percent Moisture Analytical Method: ASTM D2974-87

Percent Molsture 14.2 % 0.10 1 04/18/13 17:29

Date: 04/24/2013 04:54 PM

REPORT OF LABORATORY ANALYSIS

Page 18 of 51



ANALYTICAL RESULTS

Project: McDonalds Edgewood

Pace Project No.: 3091547

Sample: B9 4.5-6	Lab ID: 30915470	09 Collected: 04/09/1	13 09:40	Received: 0	4/10/13 13:50	Matrix: Solid	
Results reported on a "dry-weigh	n" basis						
Parameters	Results Ur	nits Report Limit	DF	Prepared	Analyzed	CAS No.	Qua
8260 MSV 5030 Low Level	Analytical Method: El	PA 8260					
Acetone	16.7 ug/kg	9.3	1		04/15/13 16:26		
Benzene	ND ug/kg	4.7	1		04/15/13 16:26		
Bromodichioromethane	ND ug/kg	4.7	1		04/15/13 16:26	75-27-4	
Bromoform	ND ug/kg	4.7	1		04/15/13 16:26	75-25-2	
Bromomethane	ND ug/kg	4.7	1		04/15/13 16:26	74-83-9	
TOTAL BTEX	ND ug/kg	28.0	1		04/15/13 16:26		
2-Butanone (MEK)	ND ug/kg	9.3	1		04/15/13 16:26		
Carbon disulfide	ND ug/kg	4.7	1		04/15/13 16:26	75-15-0	
Carbon tetrachioride	ND ug/kg	4.7	1		04/15/13 16:26	56-23-5	
Chlorobenzene	ND ug/kg	4.7	1		04/15/13 16:26	108-90-7	
Chloroethane	ND ug/kg	4.7	1		04/15/13 16:26	75-00-3	
Chioroform	ND ug/kg	4.7	1		04/15/13 16:26	67-66-3	
Chloromethane	ND ug/kg	4.7	1		04/15/13 16:26	74-87-3	
Dibromochioromethane	ND ug/kg	4.7	1		04/15/13 16:26	124-48-1	
1,2-Dichlorobenzene	ND ug/kg	4.7	1		04/15/13 16:26	95-50-1	
1,3-Dichlorobenzene	ND ug/kg	4.7	1		04/15/13 16:26	541-73-1	
1,4-Dichlorobenzene	ND ug/kg	4.7	1		04/15/13 16:26	106-46-7	
I,1-Dichloroethane	ND ug/kg	4.7	1		04/15/13 16:26	75-34-3	
1,2-Dichloroethane	ND ug/kg	4.7	1		04/15/13 16:26	107-06-2	
1,2-Dichloroethene (Total)	ND ug/kg	9.3	1		04/15/13 16:26	540-59-0	
1,1-Dichloroethene	ND ug/kg	4.7	1		04/15/13 16:26	75-35-4	
ds-1,2-Dichloroethene	ND ug/kg	4.7	1		04/15/13 16:26	156-59-2	
rans-1,2-Dichloroethene	ND ug/kg	4.7	1		04/15/13 16:26	156-60-5	
1,2-Dichioropropane	ND ug/kg	4.7	1		04/15/13 16:26	78-87-5	
ds-1,3-Dichioropropene	ND ug/kg	4.7	1		04/15/13 16:26	10061-01-5	
rans-1,3-Dichloropropene	ND ug/kg	4.7	1		04/15/13 16:26	10061-02-6	
Ethylbenzene	ND ug/kg	4.7	1		04/15/13 16:26	100-41-4	
2-Hexanone	ND ug/kg	9.3	1		04/15/13 16:26	591-78-6	
Methylene Chloride	ND ug/kg	4.7	1		04/15/13 16:26		
4-Methyl-2-pentanone (MIBK)	ND ug/kg	9.3	1		04/15/13 16:26	108-10-1	
Methyl-tert-butyl ether	ND ug/kg	4.7	1		04/15/13 16:26		
Styrene	ND ug/kg	4.7	i		04/15/13 16:26	100-42-5	
1.1.2.2-Tetrachioroethane	ND ug/kg	4.7	1		04/15/13 16:26		
Tetrachlomethene	ND ug/kg	4.7	- 1		04/15/13 16:26		
Toluene	ND ug/kg	4.7	i		04/15/13 16:26		
1.1.1-Trichioroethane	ND ug/kg	4.7	i		04/15/13 16:26		
1.1.2-Trichioroethane	ND ug/kg	4.7	- 1		04/15/13 16:26		
Trichloroethene	8.5 ug/kg	4.7	i		04/15/13 16:26		
Vinyl chloride	ND ug/kg	4.7	i		04/15/13 16:26		
Xylene (Total)	ND ug/kg	14.0	- i		04/15/13 16:26		
m&p-Xylene	ND ug/kg	9.3	i		04/15/13 16:26		
D-Xylene	ND ug/kg	4.7	- 1		04/15/13 16:26		
Surrogates	ND ug/kg	4.7			04/13/13 10.20	53-41-0	
Surrogates Toluene-d8 (S)	99 %	70-130	1		04/15/13 16:26	2037-26-5	
4-Bromofluorobenzene (S)	101 %	70-130	- 1		04/15/13 16:26		
1,2-Dichloroethane-d4 (S)	118 %	70-130	- 1		04/15/13 16:26		
r,z-Didriloroethane-04 (5)	110 %	/U-130	1		04/15/15 16:26	1/000-07-0	

Date: 04/24/2013 04:54 PM

REPORT OF LABORATORY ANALYSIS

Page 19 of 51

This report shall not be reproduced, except in full, without the written consent of Pace Analytical Services, inc..



ANALYTICAL RESULTS

Project: McDonalds Edgewood

Pace Project No.: 3091547

Sample: B9 4.5-6 Lab ID: 3091547009 Collected: 04/09/13 09:40 Received: 04/10/13 13:50 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters Results Units Report Limit DF Prepared Analyzed CAS No. Qual

Percent Moisture Analytical Method: ASTM D2974-87

Percent Molsture 15.6 % 0.10 1 04/18/13 17:30

Date: 04/24/2013 04:54 PM

REPORT OF LABORATORY ANALYSIS

Page 20 of 51



ANALYTICAL RESULTS

Project: McDonalds Edgewood Pace Project No.: 3091547

Sample: B10 1.5-3 Lab ID: 3091547010 Collected: 04/09/13 10:50 Received: 04/10/13 13:50 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5030 Low Level	Analytical Me	thod: EPA 8260						
Acetone	38.4 u	g/kg	12.0	1		04/15/13 16:50	67-64-1	
Benzene	ND u	q/kq	6.0	1		04/15/13 16:50	71-43-2	
Bromodichioromethane	ND u	g/kg	6.0	1		04/15/13 16:50	75-27-4	
Bromoform	ND u	g/kg	6.0	1		04/15/13 16:50	75-25-2	
Bromomethane	ND u	g/kg	6.0	1		04/15/13 16:50	74-83-9	
TOTAL BTEX	ND u	g/kg	35.9	1		04/15/13 16:50		
2-Butanone (MEK)	ND u	g/kg	12.0	1		04/15/13 16:50	78-93-3	
Carbon disulfide	13.5 u	g/kg	6.0	1		04/15/13 16:50	75-15-0	
Carbon tetrachloride	ND u	g/kg	6.0	1		04/15/13 16:50	56-23-5	
Chlorobenzene	ND u	g/kg	6.0	1		04/15/13 16:50	108-90-7	
Chloroethane	ND u	g/kg	6.0	1		04/15/13 16:50	75-00-3	
Chloroform	ND u	g/kg	6.0	1		04/15/13 16:50	67-66-3	
Chloromethane	ND u	g/kg	6.0	1		04/15/13 16:50	74-87-3	
Dibromochioromethane	ND u	g/kg	6.0	1		04/15/13 16:50	124-48-1	
1,2-Dichlorobenzene	ND u	g/kg	6.0	1		04/15/13 16:50	95-50-1	
1,3-Dichlorobenzene	ND u	g/kg	6.0	1		04/15/13 16:50	541-73-1	
1,4-Dichlorobenzene	ND u	g/kg	6.0	1		04/15/13 16:50	106-46-7	
1,1-Dichloroethane	ND u	g/kg	6.0	1		04/15/13 16:50	75-34-3	
1,2-Dichloroethane	ND u	g/kg	6.0	1		04/15/13 16:50	107-06-2	
1,2-Dichloroethene (Total)	ND u	g/kg	12.0	1		04/15/13 16:50	540-59-0	
1,1-Dichloroethene	ND u	g/kg	6.0	1		04/15/13 16:50	75-35-4	
cis-1,2-Dichloroethene	ND u	g/kg	6.0	1		04/15/13 16:50	156-59-2	
trans-1,2-Dichloroethene	ND u	g/kg	6.0	1		04/15/13 16:50	156-60-5	
1,2-Dichloropropane	ND u	g/kg	6.0	1		04/15/13 16:50	78-87-5	
cis-1,3-Dichioropropene	ND u	g/kg	6.0	1		04/15/13 16:50	10061-01-5	
trans-1,3-Dichloropropene	ND u	g/kg	6.0	1		04/15/13 16:50	10061-02-6	
Ethylbenzene	ND u	g/kg	6.0	1		04/15/13 16:50	100-41-4	
2-Hexanone	ND u	g/kg	12.0	1		04/15/13 16:50	591-78-6	
Methylene Chloride	ND u	g/kg	6.0	1		04/15/13 16:50	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND u	g/kg	12.0	1		04/15/13 16:50	108-10-1	
Methyl-tert-butyl ether	ND u	g/kg	6.0	1		04/15/13 16:50	1634-04-4	
Styrene	ND u	g/kg	6.0	1		04/15/13 16:50		
1,1,2,2-Tetrachioroethane	ND u	g/kg	6.0	1		04/15/13 16:50	79-34-5	
Tetrachioroethene	ND u	g/kg	6.0	1		04/15/13 16:50	127-18-4	
Toluene	ND u	g/kg	6.0	1		04/15/13 16:50	108-88-3	
1,1,1-Trichioroethane	ND u	g/kg	6.0	1		04/15/13 16:50	71-55-6	
1,1,2-Trichioroethane	ND u	g/kg	6.0	1		04/15/13 16:50	79-00-5	
Trichloroethene	ND u	g/kg	6.0	1		04/15/13 16:50		
Vinyl chloride	ND u	g/kg	6.0	1		04/15/13 16:50		
Xylene (Total)	ND u	g/kg	17.9	1		04/15/13 16:50		
m&p-Xylene	ND u	g/kg	12.0	1		04/15/13 16:50		
o-Xylene	ND u	g/kg	6.0	1		04/15/13 16:50	95-47-6	
Surrogates								
Toluene-d8 (S)	96 9	-	70-130	1		04/15/13 16:50		
4-Bromofluorobenzene (S)	107 9		70-130	1		04/15/13 16:50		
1,2-Dichloroethane-d4 (S)	122 9	6	70-130	1		04/15/13 16:50	17060-07-0	

Date: 04/24/2013 04:54 PM

REPORT OF LABORATORY ANALYSIS

Page 21 of 51

This report shall not be reproduced, except in full, without the written consent of Pace Analytical Services, Inc..



ANALYTICAL RESULTS

Project: McDonalds Edgewood

Pace Project No.: 3091547

Sample: B10 1.5-3 Lab ID: 3091547010 Collected: 04/09/13 10:50 Received: 04/10/13 13:50 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters Results Units Report Limit DF Prepared Analyzed CAS No. Qual

Percent Moisture Analytical Method: ASTM D2974-87

Percent Moisture 12.9 % 0.10 1 04/18/13 17:30

Date: 04/24/2013 04:54 PM

REPORT OF LABORATORY ANALYSIS

Page 22 of 51



ANALYTICAL RESULTS

Project: McDonalds Edgewood

Pace Project No.: 3091547

Sample: B8	Lab ID: 3091547011 (Collected: 04/08/13	14:50	Received: 04	/10/13 13:50	Matrix: Water	
Parameters	Results Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qua
6010 MET ICP, Lab Filtered	Analytical Method: EPA 6010	Preparation Metho	od: EPA	3005			
Aluminum, Dissolved	642 ug/L	50.0	1	04/12/13 16:39	04/15/13 09:3	7429-90-5	
Antimony, Dissolved	ND ug/L	6.0		04/12/13 16:39			
Arsenic, Dissolved	ND ug/L	5.0		04/12/13 16:39			
Barlum, Dissolved	89.3 ug/L	10.0		04/12/13 16:39			
Beryllum, Dissolved	ND ug/L	1.0		04/12/13 16:39			
Boron, Dissolved	164 ug/L	50.0		04/12/13 16:39			
Cadmium, Dissolved	ND ug/L	3.0		04/12/13 16:39			
Calcium, Dissolved	116000 ug/L	1000		04/12/13 16:39			
Chromlum, Dissolved	ND ug/L	5.0		04/12/13 16:39			
Cobalt, Dissolved	5.5 ug/L	5.0		04/12/13 16:39			
Copper, Dissolved	ND ug/L	5.0		04/12/13 16:39			
Iron, Dissolved	391 ug/L	70.0		04/12/13 16:39			
Lead, Dissolved	ND ug/L	5.0		04/12/13 16:39			
Magnesium, Dissolved	19300 ug/L	200		04/12/13 16:39			
Manganese, Dissolved	7600 ug/L	5.0		04/12/13 16:39			
Molybdenum, Dissolved	ND ug/L	20.0		04/12/13 16:39			
Nickel, Dissolved	ND ug/L	10.0		04/12/13 16:39			
Potassium, Dissolved	4920 ug/L	500		04/12/13 16:39			
Selenium, Dissolved	ND ug/L	8.0	1	04/12/13 16:39	04/15/13 09:3	8 7782-49-2	
Silver, Dissolved	ND ug/L	6.0		04/12/13 16:39			
Sodium, Dissolved	9640 ug/L	1000		04/12/13 16:39			
Thallium, Dissolved	ND ug/L	10.0		04/12/13 16:39			
/anadium, Dissolved	ND ug/L	5.0		04/12/13 16:39			
Zinc, Dissolved	ND ug/L	10.0	1	04/12/13 16:39	04/15/13 09:3	8 7440-66-6	
7470 Mercury, Lab Filtered	Analytical Method: EPA 7470	Preparation Metho	od: EPA	7470			
Mercury, Dissolved	ND ug/L	0.20	1	04/15/13 09:12	04/15/13 15:5	9 7439-97-6	
3260 MSV	Analytical Method: EPA 8260)					
Acetone	ND ug/L	10.0	1		04/12/13 17:59	9 67-64-1	
Benzene	ND ug/L	1.0	1		04/12/13 17:59	71-43-2	
Bromochioromethane	ND ug/L	1.0	1		04/12/13 17:59	9 74-97-5	
Bromodichioromethane	ND ug/L	1.0	1		04/12/13 17:59	9 75-27-4	
Bromoform	ND ug/L	1.0	1		04/12/13 17:5	75-25-2	
Bromomethane	1.9 ug/L	1.0	1		04/12/13 17:5	9 74-83-9	
2-Butanone (MEK)	ND ug/L	10.0	1		04/12/13 17:59	9 78-93-3	
Carbon disulfide	ND ug/L	1.0	1		04/12/13 17:5	9 75-15-0	
Carbon tetrachioride	ND ug/L	1.0	1		04/12/13 17:5	9 56-23-5	
Chlorobenzene	ND ug/L	1.0	1		04/12/13 17:59	9 108-90-7	
Chloroethane	ND ug/L	1.0	1		04/12/13 17:5	9 75-00-3	
Chloroform	ND ug/L	1.0	1		04/12/13 17:5	9 67-66-3	
Chloromethane	ND ug/L	1.0	1		04/12/13 17:5	9 74-87-3	
Dibromochioromethane	ND ug/L	1.0	1		04/12/13 17:5	9 124-48-1	
1,2-Dichlorobenzene	ND ug/L	1.0	1		04/12/13 17:5	9 95-50-1	
1,3-Dichlorobenzene	ND ug/L	1.0	1		04/12/13 17:5	9 541-73-1	
1,4-Dichlorobenzene	ND ug/L	1.0	1		04/12/13 17:59	9 106-46-7	

Date: 04/24/2013 04:54 PM

REPORT OF LABORATORY ANALYSIS

Page 23 of 51

This report shall not be reproduced, except in full, without the written consent of Pace Analytical Services, inc..



ANALYTICAL RESULTS

Project: McDonalds Edgewood

Pace Project No.: 3091547

Sample: B8	Lab ID: 309154701	11 Collected: 04/08/1	3 14:50	Received: 04	4/10/13 13:50	Matrix: Water	
Parameters	Results Un	its Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EF	PA 8260					
1,1-Dichloroethane	ND ug/L	1.0	1		04/12/13 17:5	9 75-34-3	
1,2-Dichloroethane	ND ug/L	1.0	1		04/12/13 17:5	9 107-06-2	
1,2-Dichloroethene (Total)	ND ug/L	2.0	1		04/12/13 17:5	9 540-59-0	
1,1-Dichloroethene	ND ug/L	1.0	1		04/12/13 17:5	9 75-35-4	
cis-1,2-Dichloroethene	ND ug/L	1.0	1		04/12/13 17:5	9 156-59-2	
trans-1,2-Dichloroethene	ND ug/L	1.0	1		04/12/13 17:5	9 156-60-5	
1,2-Dichloropropane	ND ug/L	1.0	1		04/12/13 17:5	9 78-87-5	
cis-1,3-Dichioropropene	ND ug/L	1.0	1		04/12/13 17:5	9 10061-01-5	
trans-1,3-Dichloropropene	ND ug/L	1.0	1		04/12/13 17:5	9 10061-02-6	
Ethylbenzene	ND ug/L	1.0	1		04/12/13 17:5	9 100-41-4	
2-Hexanone	ND ug/L	10.0	1		04/12/13 17:5	9 591-78-6	
Methylene Chloride	ND ug/L	1.0	1		04/12/13 17:5	9 75-09-2	
4-Methyl-2-pentanone (MIBK)	ND ug/L	10.0	1		04/12/13 17:5	9 108-10-1	
Methyl-tert-butyl ether	ND ug/L	1.0	1		04/12/13 17:5	9 1634-04-4	
Styrene	ND ug/L	1.0	1		04/12/13 17:5	9 100-42-5	
1.1.2.2-Tetrachloroethane	ND ug/L	1.0	1		04/12/13 17:5	9 79-34-5	
Tetrachloroethene	ND ug/L	1.0	1		04/12/13 17:5	9 127-18-4	
Toluene	ND ug/L	1.0	1		04/12/13 17:5	9 108-88-3	
1.2.4-Trichiorobenzene	ND ug/L	1.0	1		04/12/13 17:5	9 120-82-1	
1.1.1-Trichioroethane	ND ug/L	1.0	1		04/12/13 17:5	9 71-55-6	
1,1,2-Trichloroethane	ND ug/L	1.0	1		04/12/13 17:5	9 79-00-5	
Trichioroethene	ND ug/L	1.0	1		04/12/13 17:5	9 79-01-6	
Vinvi chloride	ND ug/L	1.0	1		04/12/13 17:5	9 75-01-4	
Xylene (Total)	ND ug/L	3.0	1		04/12/13 17:5	9 1330-20-7	
m&p-Xylene	ND ug/L	2.0	1		04/12/13 17:5	9 179601-23-1	
o-Xylene	ND ug/L	1.0	1		04/12/13 17:5		
Surrogates			-				
4-Bromofluorobenzene (S)	99 %	85-115	1		04/12/13 17:5	9 460-00-4	
1,2-Dichloroethane-d4 (S)	107 %	77-119	1		04/12/13 17:5	9 17060-07-0	
Toluene-d8 (S)	92 %	85-115	1		04/12/13 17:5		

Date: 04/24/2013 04:54 PM

REPORT OF LABORATORY ANALYSIS

Page 24 of 51



ANALYTICAL RESULTS

Project: McDonalds Edgewood Pace Project No.: 3091547

Sample: B9	Lab ID: 3091547012	Collected: 04/09/1	3 09:15	Received: 04	1/10/13 13:50	Matrix: Water	
Parameters	Results Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qua
010 MET ICP, Lab Filtered	Analytical Method: EPA	6010 Preparation Metr	nod: EP	A 3005			
Aluminum, Dissolved	132 ug/L	50.0	1	04/12/13 16:39	04/15/13 09:5	6 7429-90-5	
Antimony, Dissolved	ND ug/L	6.0	1	04/12/13 16:39	04/15/13 09:5	6 7440-36-0	
Arsenic, Dissolved	ND ug/L	5.0	1	04/12/13 16:39	04/15/13 09:5	6 7440-38-2	
Barlum, Dissolved	91.1 ug/L	10.0	1	04/12/13 16:39	04/15/13 09:5	6 7440-39-3	
Beryllum, Dissolved	ND ug/L	1.0	1	04/12/13 16:39	04/15/13 09:5	6 7440-41-7	
Boron, Dissolved	330 ug/L	50.0	1	04/12/13 16:39	04/15/13 09:5	6 7440-42-8	
Cadmium, Dissolved	8.3 ug/L	3.0	1	04/12/13 16:39	04/15/13 09:5	6 7440-43-9	
Calcium, Dissolved	214000 ug/L	1000	1	04/12/13 16:39	04/15/13 09:5	6 7440-70-2	
Chromium, Dissolved	ND ug/L	5.0	1	04/12/13 16:39	04/15/13 09:5	6 7440-47-3	
Cobalt, Dissolved	5.9 ug/L	5.0	1	04/12/13 16:39			
Copper, Dissolved	9.2 ug/L	5.0	1	04/12/13 16:39	04/15/13 09:5	6 7440-50-8	
ron, Dissolved	340 ug/L	70.0	1		04/15/13 09:5		
Lead, Dissolved	15.2 ug/L	5.0	1		04/15/13 09:5		
Magnesium, Dissolved	39000 ug/L	200	1		04/15/13 09:5		
Manganese, Dissolved	2290 ug/L	5.0	1		04/15/13 09:5		
Molybdenum, Dissolved	ND ug/L	20.0	1	04/12/13 16:39			
Nickel, Dissolved	27.8 ug/L	10.0	1		04/15/13 09:5		
Potassium, Dissolved	7640 ug/L	500	1	04/12/13 16:39			
Selenium, Dissolved	ND ug/L	8.0	1	04/12/13 16:39	04/15/13 09:5	6 7782-49-2	
Sliver, Dissolved	ND ug/L	6.0	1		04/15/13 09:5		
Godium, Dissolved	82800 ug/L	1000	1	04/12/13 16:39			
Thallium, Dissolved	ND ug/L	10.0	1	04/12/13 16:39	04/15/13 09:5	6 7440-28-0	
/anadium, Dissolved	ND ug/L	5.0	1		04/15/13 09:5		
Inc, Dissolved	14.2 ug/L	10.0	1	04/12/13 16:39	04/15/13 09:5	6 7440-66-6	
470 Mercury, Lab Filtered	Analytical Method: EPA	7470 Preparation Metr	nod: EP	A 7470			
Mercury, Dissolved	ND ug/L	0.20	1	04/15/13 09:12	04/15/13 16:0	0 7439-97-6	
3260 MSV	Analytical Method: EPA	8260					
Acetone	ND ug/L	10.0	1		04/12/13 18:2	6 67-64-1	
Benzene	ND ug/L	1.0	1		04/12/13 18:2	6 71-43-2	
Bromochloromethane	ND ug/L	1.0	1		04/12/13 18:2	6 74-97-5	
Bromodichioromethane	ND ug/L	1.0	1		04/12/13 18:2	6 75-27-4	
Bromoform	ND ug/L	1.0	1		04/12/13 18:2	6 75-25-2	
Bromomethane	ND ug/L	1.0	1		04/12/13 18:2	6 74-83-9	
2-Butanone (MEK)	ND ug/L	10.0	1		04/12/13 18:2	6 78-93-3	
Carbon disulfide	ND ug/L	1.0	1		04/12/13 18:2	6 75-15-0	
Carbon tetrachioride	ND ug/L	1.0	1		04/12/13 18:2	6 56-23-5	
Chlorobenzene	ND ug/L	1.0	1		04/12/13 18:2	6 108-90-7	
Chloroethane	ND ug/L	1.0	1		04/12/13 18:2		
Chioroform	ND ug/L	1.0	1		04/12/13 18:2	6 67-66-3	
Chioromethane	ND ug/L	1.0	1		04/12/13 18:2	6 74-87-3	
Olbromochloromethane	ND ug/L	1.0	1		04/12/13 18:2	5 124-48-1	
1,2-Dichlorobenzene	ND ug/L	1.0	1		04/12/13 18:2	6 95-50-1	
1,3-Dichlorobenzene	ND ug/L	1.0	1		04/12/13 18:2	6 541-73-1	
1,4-Dichlorobenzene	ND ug/L	1.0	1		04/12/13 18:2	6 106-46-7	

Date: 04/24/2013 04:54 PM

REPORT OF LABORATORY ANALYSIS

Page 25 of 51

This report shall not be reproduced, except in full, without the written consent of Pace Analytical Services, Inc..



ANALYTICAL RESULTS

Project: McDonalds Edgewood

Pace Project No.: 3091547

Sample: B9	Lab ID: 309154701;	2 Collected: 04/09/1	3 09:15	Received: 04/1	0/13 13:50	Matrix: Water	
Parameters	Results Uni	ts Report Limit	DF	Prepared	Analyzed	CAS No.	Qua
8260 MSV	Analytical Method: EP	A 8260					
1,1-Dichloroethane	ND ug/L	1.0	1	C	04/12/13 18:26	5 75-34-3	
1,2-Dichloroethane	ND ug/L	1.0	1	0	14/12/13 18:26	5 107-06-2	
1,2-Dichloroethene (Total)	ND ug/L	2.0	1	0	14/12/13 18:26	5 540-59-0	
1,1-Dichloroethene	ND ug/L	1.0	1	0	14/12/13 18:26	5 75-35-4	
cis-1,2-Dichioroethene	ND ug/L	1.0	1	0	14/12/13 18:26	5 156-59-2	
trans-1,2-Dichloroethene	ND ug/L	1.0	1	0	14/12/13 18:26	5 156-60-5	
1,2-Dichloropropane	ND ug/L	1.0	1	0	14/12/13 18:26	5 78-87-5	
cis-1,3-Dichioropropene	ND ug/L	1.0	1	0	14/12/13 18:26	5 10061-01-5	
trans-1,3-Dichloropropene	ND ug/L	1.0	1	0	14/12/13 18:26	5 10061-02-6	
Ethylbenzene	ND ug/L	1.0	1	0	14/12/13 18:26	5 100-41-4	
2-Hexanone	ND ug/L	10.0	1	0	14/12/13 18:26	5 591-78-6	
Methylene Chloride	ND ug/L	1.0	1	0	14/12/13 18:26	5 75-09-2	
4-Methyl-2-pentanone (MIBK)	ND ug/L	10.0	1	0	14/12/13 18:26	5 108-10-1	
Methyl-tert-butyl ether	ND ug/L	1.0	1	0	14/12/13 18:26	5 1634-04-4	
Styrene	ND ug/L	1.0	1	0	14/12/13 18:26	5 100-42-5	
1,1,2,2-Tetrachioroethane	ND ug/L	1.0	1	0	14/12/13 18:26	5 79-34-5	
Tetrachioroethene	ND ug/L	1.0	1	0	14/12/13 18:26	5 127-18-4	
Toluene	ND ug/L	1.0	1	0	14/12/13 18:26	5 108-88-3	
1,2,4-Trichlorobenzene	ND ug/L	1.0	1	0	14/12/13 18:26	5 120-82-1	
1,1,1-Trichioroethane	ND ug/L	1.0	1	0	04/12/13 18:26	5 71-55-6	
1,1,2-Trichioroethane	ND ug/L	1.0	1	0	14/12/13 18:26	79-00-5	
Trichloroethene	ND ug/L	1.0	1	0	14/12/13 18:26	5 79-01-6	
Vinyl chloride	ND ug/L	1.0	1	0	14/12/13 18:26	5 75-01-4	
Xylene (Total)	ND ug/L	3.0	1	C	14/12/13 18:26	5 1330-20-7	
m&p-Xylene	ND ug/L	2.0	1	0	14/12/13 18:26	5 179601-23-1	
o-Xylene	ND ug/L	1.0	1	0	04/12/13 18:26	5 95-47-6	
Surrogates							
4-Bromofluorobenzene (S)	101 %	85-115	1	0	14/12/13 18:26	5 460-00-4	
1,2-Dichloroethane-d4 (S)	106 %	77-119	1	0	14/12/13 18:26	5 17060-07-0	
Toluene-d8 (S)	90 %	85-115	1	0	14/12/13 18:26	5 2037-26-5	

Date: 04/24/2013 04:54 PM

REPORT OF LABORATORY ANALYSIS

Page 26 of 51



ANALYTICAL RESULTS

Project: McDonalds Edgewood

Pace Project No.: 3091547

Sample: B1 1-2.5	Lab ID: 3091547013	Collected: 04/08/1	3 09:25	Received: 04	/10/13 13:50 N	tatrix: Solid	
Results reported on a "dry-we	eight" basis						
Parameters	Results Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qua
010 MET ICP	Analytical Method: EPA 601	0B Preparation Me	thod: E	PA 3050			
Aluminum	2820 mg/kg	8.6	1	04/12/13 11:04	04/23/13 13:03	7429-90-5	
Antimony	0.64 mg/kg	0.52	1	04/12/13 11:04	04/23/13 13:03	7440-36-0	
Arsenic	112 mg/kg	0.43	1	04/12/13 11:04	04/23/13 13:03	7440-38-2	
Barlum	186 mg/kg	1.7	1	04/12/13 11:04	04/23/13 13:03	7440-39-3	
Beryllum	0.39 mg/kg	0.17	1	04/12/13 11:04	04/23/13 13:03	7440-41-7	
Boron	6.6 mg/kg	4.3	1	04/12/13 11:04	04/23/13 13:03	7440-42-8	
Cadmium	0.47 mg/kg	0.26	1	04/12/13 11:04	04/23/13 13:03	7440-43-9	
Caldum	352 mg/kg	172	1	04/12/13 11:04	04/23/13 13:03	7440-70-2	
Chromium	18.9 mg/kg	0.43	1	04/12/13 11:04	04/23/13 13:03	7440-47-3	
Cobalt	2.9 mg/kg	0.86	1	04/12/13 11:04	04/23/13 13:03	7440-48-4	
Copper	125 mg/kg	0.86	1	04/12/13 11:04	04/23/13 13:03	7440-50-8	
ron	55400 mg/kg	86.0	10	04/12/13 11:04	04/23/13 15:11	7439-89-6	
.ead	173 mg/kg	0.43	1	04/12/13 11:04	04/23/13 13:03	7439-92-1	
Magnesium	250 mg/kg	43.0	1	04/12/13 11:04	04/23/13 13:03	7439-95-4	
Manganese	86.1 mg/kg	0.86	1	04/12/13 11:04	04/23/13 13:03	7439-96-5	
Molybdenum	2.6 mg/kg	1.7	1	04/12/13 11:04	04/23/13 13:03	7439-98-7	
Nickel	6.1 mg/kg	1.7	1	04/12/13 11:04	04/23/13 13:03	7440-02-0	
Potassium	698 mg/kg	43.0	1	04/12/13 11:04	04/23/13 13:03	7440-09-7	
Selenium	2.8 mg/kg	0.69	1	04/12/13 11:04	04/23/13 13:03	7782-49-2	
Silver	ND mg/kg	0.52	1	04/12/13 11:04	04/23/13 13:03	7440-22-4	
Sodium	ND mg/kg	430	1	04/12/13 11:04	04/23/13 13:03	7440-23-5	
Thallum	ND mg/kg	1.7	1	04/12/13 11:04	04/23/13 13:03	7440-28-0	
/anadlum	19.0 mg/kg	0.86	1	04/12/13 11:04	04/23/13 13:03	7440-62-2	
Zinc	30.1 mg/kg	0.86	1	04/12/13 11:04	04/23/13 13:03	7440-66-6	
471 Mercury	Analytical Method: EPA 747	1 Preparation Met	nod: EP	A 7471			
Mercury	ND mg/kg	0.11	1	04/15/13 13:19	04/16/13 10:52	7439-97-6	
Percent Moisture	Analytical Method: ASTM D	2974-87					

Date: 04/24/2013 04:54 PM

Percent Moisture

REPORT OF LABORATORY ANALYSIS

15.7 %

0.10 1 04/18/13 17:30

Page 27 of 51



ANALYTICAL RESULTS

Project: McDonalds Edgewood

Pace Project No.: 3091547

Sample: B3 1-2.5	Lab ID: 3091547014	Collected: 04/08/1	13 11:20	Received: 04	/10/13 13:50	Matrix: Solid	
Results reported on a "dry-we	ight" basis						
Parameters	Results Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qua
9010 MET ICP	Analytical Method: EPA	6010B Preparation Me	ethod: E	PA 3050			
Aluminum	18200 mg/kg	10.6	1	04/12/13 11:04	04/23/13 13:06	7429-90-5	
Antimony	0.84 mg/kg	0.64	1	04/12/13 11:04	04/23/13 13:06	7440-36-0	
Arsenic	37.9 mg/kg	0.53	1	04/12/13 11:04	04/23/13 13:06	7440-38-2	
Barlum	952 mg/kg	2.1	1	04/12/13 11:04	04/23/13 13:06	7440-39-3	
Beryllum	1.2 mg/kg	0.21	1	04/12/13 11:04	04/23/13 13:06	7440-41-7	
Boron	12.7 mg/kg	5.3	1	04/12/13 11:04	04/23/13 13:06	7440-42-8	
Cadmium	6.8 mg/kg	0.32	1	04/12/13 11:04	04/23/13 13:06	7440-43-9	
Calcium	26800 mg/kg	212	1	04/12/13 11:04	04/23/13 13:06	7440-70-2	
Chromlum	67.3 mg/kg	0.53	1	04/12/13 11:04	04/23/13 13:06	7440-47-3	
Cobalt	12.2 mg/kg	1.1	1	04/12/13 11:04	04/23/13 13:06	7440-48-4	
Copper	110 mg/kg	1.1	1	04/12/13 11:04	04/23/13 13:06	7440-50-8	
ron	48600 mg/kg	10.6	1	04/12/13 11:04	04/23/13 13:06	7439-89-6	
Lead	183 mg/kg	0.53	1	04/12/13 11:04	04/23/13 13:06	7439-92-1	
Magnesium	2280 mg/kg	52.9	1	04/12/13 11:04	04/23/13 13:06	7439-95-4	
Manganese	2330 mg/kg	1.1	1	04/12/13 11:04	04/23/13 13:06	7439-96-5	
Molybdenum	ND mg/kg	2.1	1	04/12/13 11:04	04/23/13 13:06	7439-98-7	
Nickel	38.6 mg/kg	2.1	1	04/12/13 11:04	04/23/13 13:06	7440-02-0	
Potassium	2340 mg/kg	52.9	1	04/12/13 11:04	04/23/13 13:06	7440-09-7	
Selenium	ND mg/kg	0.85	1	04/12/13 11:04	04/23/13 13:06	7782-49-2	
Silver	ND mg/kg	0.64	1	04/12/13 11:04	04/23/13 13:06	7440-22-4	
Sodium	885 mg/kg	529	1	04/12/13 11:04	04/23/13 13:06	7440-23-5	
Thallum	ND mg/kg	2.1	1	04/12/13 11:04	04/23/13 13:06	7440-28-0	
Vanadium	35.3 mg/kg	1.1	1	04/12/13 11:04	04/23/13 13:06	7440-62-2	
Zinc	228 mg/kg	1.1	1	04/12/13 11:04	04/23/13 13:06	7440-66-6	
471 Mercury	Analytical Method: EPA	7471 Preparation Met	hod: EP	A 7471			
Mercury	0.33 mg/kg	0.11	1	04/15/13 13:19	04/16/13 10:57	7 7439-97-6	
Percent Moisture	Analytical Method: AST	M D2974-87					

17.2 %

Date: 04/24/2013 04:54 PM

Percent Moisture

REPORT OF LABORATORY ANALYSIS

0.10 1 04/18/13 17:31

Page 28 of 51



ANALYTICAL RESULTS

McDonalds Edgewood Project:

Pace Project No.: 3091547

ample: B5 0-1.5 esults reported on a "dry-weight" i		cted: 04/08/13	12:55	Received: 04	/10/13 13:50 N	Matrix: Solid	
Parameters Parameters		Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
010 MET ICP	Analytical Method: EPA 6010B P	reparation Meth	nod: EF	PA 3050			
Juminum	12000 mg/kg	10.8	1	04/12/13 11:04	04/23/13 13:09	7429-90-5	
ntimony	1.0 mg/kg	0.65	1	04/12/13 11:04	04/23/13 13:09	7440-36-0	
rsenic	15.0 mg/kg	0.54	1	04/12/13 11:04	04/23/13 13:09	7440-38-2	
arium	143 mg/kg	2.2	1	04/12/13 11:04	04/23/13 13:09	7440-39-3	
eryllum	0.67 mg/kg	0.22	1	04/12/13 11:04	04/23/13 13:09	7440-41-7	
oron	ND mg/kg	5.4	1	04/12/13 11:04	04/23/13 13:09	7440-42-8	
admlum	1.2 mg/kg	0.32	1	04/12/13 11:04	04/23/13 13:09	7440-43-9	
alclum	2760 mg/kg	216	1	04/12/13 11:04	04/23/13 13:09	7440-70-2	
hromlum	23.1 mg/kg	0.54	1	04/12/13 11:04	04/23/13 13:09	7440-47-3	
obalt	8.9 mg/kg	1.1	1	04/12/13 11:04	04/23/13 13:09	7440-48-4	
opper	45.7 mg/kg	1.1	1	04/12/13 11:04	04/23/13 13:09	7440-50-8	
on	38300 mg/kg	10.8	1	04/12/13 11:04	04/23/13 13:09	7439-89-6	
ead	85.1 mg/kg	0.54	1	04/12/13 11:04	04/23/13 13:09	7439-92-1	
lagnesium	1570 mg/kg	54.1	1	04/12/13 11:04	04/23/13 13:09	7439-95-4	
langanese	326 mg/kg	1.1	1	04/12/13 11:04	04/23/13 13:09	7439-96-5	
lolybdenum	ND mg/kg	2.2	1	04/12/13 11:04	04/23/13 13:09	7439-98-7	
lckel	21.8 mg/kg	2.2	1	04/12/13 11:04	04/23/13 13:09	7440-02-0	
otassium	1160 mg/kg	54.1	1	04/12/13 11:04	04/23/13 13:09	7440-09-7	
elenium	ND mg/kg	0.87	1	04/12/13 11:04	04/23/13 13:09	7782-49-2	
lver	ND mg/kg	0.65	1	04/12/13 11:04	04/23/13 13:09	7440-22-4	
odium	ND mg/kg	541	1	04/12/13 11:04	04/23/13 13:09	7440-23-5	
hallum	ND mg/kg	2.2	1	04/12/13 11:04	04/23/13 13:09	7440-28-0	
anadlum	25.9 mg/kg	1.1	1	04/12/13 11:04	04/23/13 13:09	7440-62-2	
Inc	166 mg/kg	1.1	1	04/12/13 11:04	04/23/13 13:09	7440-66-6	
471 Mercury	Analytical Method: EPA 7471 Pre	eparation Metho	d: EPA	7471			
lercury	0.13 mg/kg	0.11	1	04/15/13 13:19	04/16/13 10:58	7439-97-6	
ercent Moisture	Analytical Method: ASTM D2974	-87					
ercent Moisture	12.8 %	0.10	1		04/18/13 17:32	!	

Date: 04/24/2013 04:54 PM

REPORT OF LABORATORY ANALYSIS

Page 29 of 51



ANALYTICAL RESULTS

Project: McDonalds Edgewood

Pace Project No.: 3091547

ample: B7 0-1.5 lesults reported on a "dry-weig	Lab ID: 3091547016	Collected: 04/08/1	3 14:25	Received: 04	/10/13 13:50	Matrix: Solid	
Parameters	Results Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
010 MET ICP	Analytical Method: EPA 6	010B Preparation Me	thod: E	PA 3050			
Juminum	14000 mg/kg	8.7	1	04/12/13 11:04	04/23/13 13:12	2 7429-90-5	
intimony	0.80 mg/kg	0.52	1	04/12/13 11:04	04/23/13 13:12	2 7440-36-0	
rsenic	17.9 mg/kg	0.44	1	04/12/13 11:04	04/23/13 13:12	2 7440-38-2	
iarium	199 mg/kg	1.7	1	04/12/13 11:04	04/23/13 13:12	2 7440-39-3	
ieryllum	0.92 mg/kg	0.17	1	04/12/13 11:04	04/23/13 13:12	2 7440-41-7	
loron	ND mg/kg	4.4	1	04/12/13 11:04	04/23/13 13:12	2 7440-42-8	
admium	1.6 mg/kg	0.26	1	04/12/13 11:04	04/23/13 13:12	2 7440-43-9	
aldum	13600 mg/kg	174	1	04/12/13 11:04	04/23/13 13:12	2 7440-70-2	
hromlum	29.3 mg/kg	0.44	1	04/12/13 11:04	04/23/13 13:12	2 7440-47-3	
obalt	11.1 mg/kg	0.87	1	04/12/13 11:04	04/23/13 13:12	2 7440-48-4	
copper	61.1 mg/kg	0.87	1	04/12/13 11:04	04/23/13 13:12	2 7440-50-8	
ron	38700 mg/kg	8.7	1	04/12/13 11:04	04/23/13 13:12	2 7439-89-6	
ead	91.2 mg/kg	0.44	1	04/12/13 11:04	04/23/13 13:12	2 7439-92-1	
fagnesium	2980 mg/kg	43.6	1	04/12/13 11:04	04/23/13 13:12	2 7439-95-4	
langanese	1320 mg/kg	0.87	1	04/12/13 11:04	04/23/13 13:12	2 7439-96-5	
folybdenum	ND mg/kg	1.7	1	04/12/13 11:04	04/23/13 13:12	2 7439-98-7	
lickel	29.0 mg/kg	1.7	1	04/12/13 11:04	04/23/13 13:12	2 7440-02-0	
otassium	1730 mg/kg	43.6	1	04/12/13 11:04	04/23/13 13:12	2 7440-09-7	
elenium	ND mg/kg	0.70	1	04/12/13 11:04	04/23/13 13:12	2 7782-49-2	
liver	ND mg/kg	0.52	1	04/12/13 11:04	04/23/13 13:12	2 7440-22-4	
odium	ND mg/kg	436	1	04/12/13 11:04	04/23/13 13:12	2 7440-23-5	
hallum	ND mg/kg	1.7	1	04/12/13 11:04	04/23/13 13:12	2 7440-28-0	
anadium	26.4 mg/kg	0.87	1	04/12/13 11:04	04/23/13 13:12	2 7440-62-2	
Inc	102 mg/kg	0.87	1	04/12/13 11:04	04/23/13 13:12	2 7440-66-6	
471 Mercury	Analytical Method: EPA 7	7471 Preparation Met	hod: EP/	A 7471			
tercury	0.20 mg/kg	0.11	1	04/15/13 13:19	04/16/13 11:00	7439-97-6	
ercent Moisture	Analytical Method: ASTM	1 D2974-87					

Date: 04/24/2013 04:54 PM

Percent Moisture

REPORT OF LABORATORY ANALYSIS

13.1 %

0.10 1 04/18/13 17:32

Page 30 of 51



ANALYTICAL RESULTS

Project: McDonalds Edgewood

Pace Project No.: 3091547

Sample: B9 0-1.5		Collected: 04/09/1	3 09:40	Received: 04	/10/13 13:50	Matrix: Solid	
Results reported on a "dry-we Parameters	Results Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
S010 MET ICP	Analytical Method: EPA 601		thed: E		, , , , , , , , , , , , , , , , , , , ,		
SOTO MET ICP	Allalytical Metriod. EPA 60 II	ub Preparation Me	ullou. E	PA SUSU			
Aluminum	11900 mg/kg	8.0	1	04/12/13 11:04	04/23/13 13:15	7429-90-5	
Antimony	ND mg/kg	0.48	1	04/12/13 11:04	04/23/13 13:15	7440-36-0	
Arsenic	15.7 mg/kg	0.40	1	04/12/13 11:04	04/23/13 13:15	7440-38-2	
Barlum	169 mg/kg	1.6	1	04/12/13 11:04	04/23/13 13:15	7440-39-3	
Beryllum	0.86 mg/kg	0.16	1	04/12/13 11:04	04/23/13 13:15	7440-41-7	
Boron	4.8 mg/kg	4.0	1	04/12/13 11:04	04/23/13 13:15	7440-42-8	
Cadmium	1.9 mg/kg	0.24	1	04/12/13 11:04	04/23/13 13:15	7440-43-9	
Caldum	60200 mg/kg	1600	10	04/12/13 11:04	04/23/13 15:14	7440-70-2	
Chromium	28.9 mg/kg	0.40	1	04/12/13 11:04	04/23/13 13:15	7440-47-3	
Cobalt	9.0 mg/kg	0.80	1	04/12/13 11:04	04/23/13 13:15	7440-48-4	
Copper	163 mg/kg	0.80	1	04/12/13 11:04	04/23/13 13:15	7440-50-8	
ron	25300 mg/kg	8.0	1	04/12/13 11:04	04/23/13 13:15	7439-89-6	
.ead	156 mg/kg	0.40	1	04/12/13 11:04	04/23/13 13:15	7439-92-1	
/lagnesium	2600 mg/kg	40.0	1	04/12/13 11:04	04/23/13 13:15	7439-95-4	
Manganese	894 mg/kg	0.80	1	04/12/13 11:04	04/23/13 13:15	7439-96-5	
Molybdenum	ND mg/kg	1.6	1	04/12/13 11:04	04/23/13 13:15	7439-98-7	
Nickel	19.5 mg/kg	1.6	1	04/12/13 11:04	04/23/13 13:15	7440-02-0	
Potassium	1690 mg/kg	40.0	1	04/12/13 11:04	04/23/13 13:15	7440-09-7	
Selenium	ND mg/kg	0.64	1	04/12/13 11:04	04/23/13 13:15	7782-49-2	
Silver	ND mg/kg	0.48	1	04/12/13 11:04	04/23/13 13:15	7440-22-4	
Sodium	ND mg/kg	400	1	04/12/13 11:04	04/23/13 13:15	7440-23-5	
Thallium	ND mg/kg	1.6	1	04/12/13 11:04	04/23/13 13:15	7440-28-0	
/anadlum	22.0 mg/kg	0.80	1	04/12/13 11:04	04/23/13 13:15	7440-62-2	
Zinc	145 mg/kg	0.80	1	04/12/13 11:04	04/23/13 13:15	7440-66-6	
7471 Mercury	Analytical Method: EPA 747	1 Preparation Met	nod: EP	A 7471			
Mercury	0.14 mg/kg	0.11	1	04/15/13 13:19	04/16/13 11:02	7439-97-6	
Percent Moisture	Analytical Method: ASTM D2	2974-87					
Percent Moisture	12.0 %	0.10	1		04/18/13 17:33		

Date: 04/24/2013 04:54 PM

REPORT OF LABORATORY ANALYSIS

Page 31 of 51



ANALYTICAL RESULTS

Project McDonalds Edgewood

Pace Project No.: 3091547

Sample: Trip Blank	Lab ID: 309154701	18 Collected: 04/09/1	ollected: 04/09/13 00:01		Received: 04/10/13 13:50 Matrix: Water		
Parameters	Results Ur	its Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: ER	PA 8260					
Acetone	ND ug/L	10.0	1		04/12/13 12:39	67-64-1	
Benzene	ND ug/L	1.0	1		04/12/13 12:39	71-43-2	
Bromochioromethane	ND ug/L	1.0	1		04/12/13 12:39	74-97-5	
Bromodichioromethane	ND ug/L	1.0	1		04/12/13 12:39	75-27-4	
Bromoform	ND ug/L	1.0	1		04/12/13 12:39	75-25-2	
Bromomethane	ND ug/L	1.0	1		04/12/13 12:39	74-83-9	
2-Butanone (MEK)	ND ug/L	10.0	1		04/12/13 12:39	78-93-3	
Carbon disulfide	ND ug/L	1.0	1		04/12/13 12:39	75-15-0	
Carbon tetrachioride	ND ug/L	1.0	1		04/12/13 12:39	56-23-5	
Chiorobenzene	ND ug/L	1.0	1		04/12/13 12:39	108-90-7	
Chloroethane	ND ug/L	1.0	1		04/12/13 12:39	75-00-3	
Chloroform	ND ug/L	1.0	1		04/12/13 12:39	67-66-3	
Chloromethane	ND ug/L	1.0	1		04/12/13 12:39	74-87-3	
Olbromochioromethane	ND ug/L	1.0	1		04/12/13 12:39	124-48-1	
,2-Dichlorobenzene	ND ug/L	1.0	1		04/12/13 12:39	95-50-1	
,3-Dichlorobenzene	ND ug/L	1.0	1		04/12/13 12:39	541-73-1	
,4-Dichlorobenzene	ND ug/L	1.0	1		04/12/13 12:39	106-46-7	
,1-Dichloroethane	ND ug/L	1.0	1		04/12/13 12:39	75-34-3	
,2-Dichloroethane	ND ug/L	1.0	1		04/12/13 12:39	107-06-2	
,2-Dichloroethene (Total)	ND ug/L	2.0	1		04/12/13 12:39	540-59-0	
,1-Dichloroethene	ND ug/L	1.0	1		04/12/13 12:39	75-35-4	
ss-1,2-Dichloroethene	ND ug/L	1.0	1		04/12/13 12:39	156-59-2	
rans-1,2-Dichloroethene	ND ug/L	1.0	1		04/12/13 12:39	156-60-5	
,2-Dichloropropane	ND ug/L	1.0	1		04/12/13 12:39	78-87-5	
ds-1,3-Dichioropropene	ND ug/L	1.0	1		04/12/13 12:39	10061-01-5	
rans-1,3-Dichloropropene	ND ug/L	1.0	1		04/12/13 12:39	10061-02-6	
Ethylbenzene	ND ug/L	1.0	1		04/12/13 12:39	100-41-4	
2-Hexanone	ND ug/L	10.0	1		04/12/13 12:39	591-78-6	
Methylene Chloride	ND ug/L	1.0	1		04/12/13 12:39	75-09-2	
-Methyl-2-pentanone (MIBK)	ND ug/L	10.0	1		04/12/13 12:39	108-10-1	
Methyl-tert-butyl ether	ND ug/L	1.0	1		04/12/13 12:39	1634-04-4	
Styrene	ND ug/L	1.0	1		04/12/13 12:39	100-42-5	
,1,2,2-Tetrachioroethane	ND ug/L	1.0	1		04/12/13 12:39	79-34-5	
Tetrachioroethene	ND ug/L	1.0	1		04/12/13 12:39	127-18-4	
Toluene	ND ug/L	1.0	1		04/12/13 12:39	108-88-3	
1,2,4-Trichlorobenzene	ND ug/L	1.0	1		04/12/13 12:39	120-82-1	
I,1,1-Trichloroethane	ND ug/L	1.0	1		04/12/13 12:39	71-55-6	
1,1,2-Trichloroethane	ND ug/L	1.0	1		04/12/13 12:39	79-00-5	
fichioroethene	ND ug/L	1.0	1		04/12/13 12:39	79-01-6	
/Inyl chloride	ND ug/L	1.0	1		04/12/13 12:39	75-01-4	
(ylene (Total)	ND ug/L	3.0	1		04/12/13 12:39	1330-20-7	
n&p-Xylene	ND ug/L	2.0	1		04/12/13 12:39	179601-23-1	
-Xylene	ND ug/L	1.0	1		04/12/13 12:39	95-47-6	
Surrogates							
I-Bromofluorobenzene (S)	98 %	85-115	1		04/12/13 12:39	460-00-4	
,2-Dichloroethane-d4 (S)	97 %	77-119	1		04/12/13 12:39	17060-07-0	
Foluene-d8 (S)	95 %	85-115	1		04/12/13 12:39	2037-26-5	

Date: 04/24/2013 04:54 PM REPORT OF LABORATORY ANALYSIS

Page 32 of 51

This report shall not be reproduced, except in full, without the written consent of Pace Analytical Services, Inc..



QUALITY CONTROL DATA

Project: McDonalds Edgewood

Pace Project No.: 3091547

QC Batch: MERP/4338 Analysis Method: EPA 7470

QC Batch Method: EPA 7470 Analysis Description: 7470 Mercury Dissolved

Associated Lab Samples: 3091547011, 3091547012

METHOD BLANK: 567825 Matrix: Water

Associated Lab Samples: 3091547011, 3091547012

 Parameter
 Units
 Blank Result
 Reporting Limit
 Analyzed
 Qualifiers

 Mercury, Dissolved
 ug/L
 ND
 0.20
 04/15/13 15:39

LABORATORY CONTROL SAMPLE: 567826

Splike LCS LCS % Rec
Parameter Units Conc. Result % Rec Limits Qualiflers

Mercury, Dissolved ug/L 1 1.0 100 85-115

MATRIX SPIKE SAMPLE: 567828 3091344002 Spike MS MS % Rec

 Parameter
 Units
 Result
 Conc.
 Result
 % Rec
 Limits
 Qualifiers

 Mercury, Dissolved
 ug/L
 ND
 2.5
 2.6
 104
 75-125

SAMPLE DUPLICATE: 567827

3091344002 Dup
Parameter Units Result Result RPD Qualifiers

Mercury, Dissolved ug/L ND ND



QUALITY CONTROL DATA

Project: McDonalds Edgewood

Pace Project No.: 3091547

 QC Batch:
 MERP/4341
 Analysis Method:
 EPA 7471

 QC Batch Method:
 EPA 7471
 Analysis Description:
 7471 Mercury

 Associated Lab Samples:
 3091547013, 3091547014, 3091547015, 3091547016, 3091547017

METHOD BLANK: 567960 Matrix: Solid

Associated Lab Samples: 3091547013, 3091547014, 3091547015, 3091547016, 3091547017

 Parameter
 Units
 Blank Result
 Reporting Limit
 Analyzed
 Qualifiers

 Mercury
 mg/kg
 ND
 0.10
 04/16/13 10:48

LABORATORY CONTROL SAMPLE: 567961

 Parameter
 Units
 Splike Conc.
 LCS Result
 LCS % Rec Limits
 Qualifiers

 Mercury
 mg/kg
 .042
 .045J
 107
 85-115

MATRIX SPIKE SAMPLE: 567963 3091547013 Spike MS MS % Rec Parameter Units Result Conc. Result % Rec Limits Qualifiers Mercury mg/kg ND .11 0.13 105 75-125

SAMPLE DUPLICATE: 567962

 Parameter
 Units
 Result
 Result
 RPD
 Qualifiers

 Mercury
 mg/kg
 ND
 ND



QUALITY CONTROL DATA

Project: McDonalds Edgewood

Pace Project No.: 3091547

 QC Batch:
 MPRP/10476
 Analysis Method:
 EPA 6010B

 QC Batch Method:
 EPA 3050
 Analysis Description:
 6010 MET

 Associated Lab Samples:
 3091547013, 3091547014, 3091547015, 3091547016, 3091547017

METHOD BLANK: 567178 Matrix: Solid

Associated Lab Samples: 3091547013, 3091547014, 3091547015, 3091547016, 3091547017

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
					Qualificio
Aluminum	mg/kg	ND	10.0	04/23/13 12:40	
Antimony	mg/kg	ND	0.60	04/23/13 12:40	
Arsenic	mg/kg	ND	0.50	04/23/13 12:40	
Barlum	mg/kg	ND	2.0	04/23/13 12:40	
Beryllium	mg/kg	ND	0.20	04/23/13 12:40	
Boron	mg/kg	ND	5.0	04/23/13 12:40	
Cadmium	mg/kg	ND	0.30	04/23/13 12:40	
Calcium	mg/kg	ND	200	04/23/13 12:40	
Chromium	mg/kg	ND	0.50	04/23/13 12:40	
Cobalt	mg/kg	ND	1.0	04/23/13 12:40	
Copper	mg/kg	ND	1.0	04/23/13 12:40	
Iron	mg/kg	ND	10.0	04/23/13 12:40	
Lead	mg/kg	ND	0.50	04/23/13 12:40	
Magnesium	mg/kg	ND	50.0	04/23/13 12:40	
Manganese	mg/kg	ND	1.0	04/23/13 12:40	
Molybdenum	mg/kg	ND	2.0	04/23/13 12:40	
Nickel	mg/kg	ND	2.0	04/23/13 12:40	
Potassium	mg/kg	ND	50.0	04/23/13 12:40	
Selenium	mg/kg	ND	0.80	04/23/13 12:40	
Silver	mg/kg	ND	0.60	04/23/13 12:40	
Sodium	mg/kg	ND	500	04/23/13 12:40	
Thaillum	mg/kg	ND	2.0	04/23/13 12:40	
Vanadlum	mg/kg	ND	1.0	04/23/13 12:40	
Zinc	mg/kg	ND	1.0	04/23/13 12:40	

LABORATORY CONTROL SAMPLE	567179					
		Spike	LCS	LCS	% Rec	
Parameter	Units	Conc.	Result	% Rec	Limits	Qualifiers
Aluminum	mg/kg	500	510	102	80-120	
Antimony	mg/kg	50	50.3	101	80-120	
Arsenic	mg/kg	50	49.0	98	80-120	
Barlum	mg/kg	50	52.9	106	80-120	
Beryllium	mg/kg	50	51.2	102	80-120	
Boron	mg/kg	50	48.3	97	80-120	
Cadmium	mg/kg	50	51.4	103	80-120	
Calcium	mg/kg	500	513	103	80-120	
Chromium	mg/kg	50	51.7	103	80-120	
Cobalt	mg/kg	50	50.3	101	80-120	
Copper	mg/kg	50	53.2	106	80-120	
Iron	mg/kg	500	525	105	80-120	
Lead	mg/kg	50	50.7	101	80-120	

Date: 04/24/2013 04:54 PM

REPORT OF LABORATORY ANALYSIS

Page 35 of 51

This report shall not be reproduced, except in full, without the written consent of Pace Analytical Services, inc..



QUALITY CONTROL DATA

Project: McDonalds Edgewood

Pace Project No.: 3091547

LABORATORY CONTROL SAMPLE: 567179

Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
mg/kg	500	514	103	80-120	
mg/kg	50	51.6	103	80-120	
mg/kg	50	53.7	107	80-120	
mg/kg	50	51.6	103	80-120	
mg/kg	500	479	96	80-120	
mg/kg	50	44.2	88	80-120	
mg/kg	25	25.1	100	80-120	
mg/kg	500	497J	99	80-120	
mg/kg	50	50.3	101	80-120	
mg/kg	50	52.0	104	80-120	
mg/kg	50	50.4	101	80-120	
	Units mg/kg	Units Spike Conc. mg/kg 500 mg/kg 50 mg/kg 50 mg/kg 50 mg/kg 50 mg/kg 500 mg/kg 50	Units Splike Conc. LCS Result mg/kg 500 514 mg/kg 50 51.6 mg/kg 50 53.7 mg/kg 50 51.6 mg/kg 50 479 mg/kg 50 44.2 mg/kg 25 25.1 mg/kg 500 497J mg/kg 50 50.3 mg/kg 50 52.0	Units Spike Conc. LCS Result LCS % Rec mg/kg 500 514 103 mg/kg 50 51.6 103 mg/kg 50 53.7 107 mg/kg 50 51.6 103 mg/kg 50 479 96 mg/kg 50 44.2 88 mg/kg 25 25.1 100 mg/kg 500 497.J 99 mg/kg 50 50.3 101 mg/kg 50 52.0 104	Units Spike Conc. LCS Result LCS Rec LCS LImits mg/kg 500 514 103 80-120 mg/kg 50 51.6 103 80-120 mg/kg 50 53.7 107 80-120 mg/kg 50 51.6 103 80-120 mg/kg 500 479 96 80-120 mg/kg 50 44.2 88 80-120 mg/kg 25 25.1 100 80-120 mg/kg 500 497J 99 80-120 mg/kg 50 50.3 101 80-120 mg/kg 50 50.3 101 80-120 mg/kg 50 50.3 101 80-120

MATRIX SPIKE SAMPLE:	567181						
Parameter	Units	3091479034 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Aluminum	mg/kg	4900	507	6730	361	80-120	M1
Antimony	mg/kg	0.60	50.7	27.2	53	80-120	M1
Arsenic	mg/kg	69.7	50.7	88.4	37	80-120	M1
Barlum	mg/kg	45.7	50.7	89.4	86	80-120	
Beryllium	mg/kg	0.28	50.7	48.7	96	80-120	
Boron	mg/kg	ND	50.7	46.3	91	80-120	
Cadmium	mg/kg	ND	50.7	47.8	94	80-120	
Calcium	mg/kg	712	507	1410	138	80-120	M1
Chromium	mg/kg	11.9	50.7	60.8	97	80-120	
Cobalt	mg/kg	3.4	50.7	50.6	93	80-120	
Copper	mg/kg	14.6	50.7	63.1	96	80-120	
ron	mg/kg	18500	507	16500	-395	80-120	M1
Lead	mg/kg	45.6	50.7	73.0	54	80-120	M1
Magneslum	mg/kg	1700	507	2490	155	80-120	M1
Manganese	mg/kg	84.6	50.7	150	130	80-120	M1
Molybdenum	mg/kg	ND	50.7	50.9	98	80-120	
Nickel	mg/kg	6.9	50.7	56.2	97	80-120	
Potassium	mg/kg	1260	507	1770	100	80-120	
Selenium	mg/kg	3.6	50.7	45.2	82	80-120	
Silver	mg/kg	ND	25.3	24.1	95	80-120	
Sodium	mg/kg	584	507	980	78	80-120	M1
Thaillum	mg/kg	ND	50.7	27.4	54	80-120	M1
/anadium	mg/kg	21.1	50.7	65.6	88	80-120	
Zinc	mg/kg	11.2	50.7	59.9	96	80-120	

SAMPLE	DUPLICATE:	567180

Parameter	Units	3091479034 Result	Dup Result	RPD	Qualifiers
Aluminum Antimony	mg/kg mg/kg	4900 0.60	5550 ND	12	

Date: 04/24/2013 04:54 PM

REPORT OF LABORATORY ANALYSIS

Page 36 of 51

This report shall not be reproduced, except in full, without the written consent of Pace Analytical Services, Inc..



QUALITY CONTROL DATA

Project: McDonalds Edgewood

Pace Project No.: 3091547

SAMPLE DUPLICATE: 567180

Parameter	Units	3091479034 Result	Dup Result	RPD Qualiflers	
Arsenic	mg/kg	69.7	55.3	23 D6	-
Barlum	mg/kg	45.7	45.1	1	
Beryllium	mg/kg	0.28	0.27	7	
Boron	mg/kg	ND	ND		
Cadmium	mg/kg	ND	ND		
Calcium	mg/kg	712	798	11	
Chromium	mg/kg	11.9	12.3	3	
Cobalt	mg/kg	3.4	4.2	21 D6	
Copper	mg/kg	14.6	14.5	.4	
Iron	mg/kg	18500	18900	2	
Lead	mg/kg	45.6	35.9	24 D6	
Magnesium	mg/kg	1700	1970	15	
Manganese	mg/kg	84.6	102	19	
Molybdenum	mg/kg	ND	1.1J		
Nickel	mg/kg	6.9	8.1	16	
Potassium	mg/kg	1260	1390	9	
Selenium	mg/kg	3.6	3.0	18	
Silver	mg/kg	ND	ND		
Sodium	mg/kg	584	531	10	
Thaillum	mg/kg	ND	ND		
Vanadlum	mg/kg	21.1	20.0	6	
Zinc	mg/kg	11.2	14.3	25 D6	

Date: 04/24/2013 04:54 PM



QUALITY CONTROL DATA

Project: McDonalds Edgewood

Pace Project No.: 3091547

QC Batch: MPRP/10482 Analysis Method: EPA 6010

QC Batch Method: EPA 3005 Analysis Description: 6010 MET Dissolved

Associated Lab Samples: 3091547011, 3091547012

METHOD BLANK: 567484 Matrix: Water

Associated Lab Samples: 3091547011, 3091547012

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Aluminum, Dissolved	ug/L	ND	50.0	04/15/13 08:10	
Antimony, Dissolved	ug/L	ND	6.0	04/15/13 08:10	
Arsenic, Dissolved	ug/L	ND	5.0	04/15/13 08:10	
Barlum, Dissolved	ug/L	ND	10.0	04/15/13 08:10	
Beryllium, Dissolved	ug/L	ND	1.0	04/15/13 08:10	
Boron, Dissolved	ug/L	ND	50.0	04/15/13 08:10	
Cadmium, Dissolved	ug/L	ND	3.0	04/15/13 08:10	
Calcium, Dissolved	ug/L	ND	1000	04/15/13 08:10	
Chromium, Dissolved	ug/L	6.0	5.0	04/15/13 08:10	
Cobalt, Dissolved	ug/L	ND	5.0	04/15/13 08:10	
Copper, Dissolved	ug/L	ND	5.0	04/15/13 08:10	
Iron, Dissolved	ug/L	ND	70.0	04/15/13 08:10	
Lead, Dissolved	ug/L	ND	5.0	04/15/13 08:10	
Magnesium, Dissolved	ug/L	ND	200	04/15/13 08:10	
Manganese, Dissolved	ug/L	ND	5.0	04/15/13 08:10	
Molybdenum, Dissolved	ug/L	ND	20.0	04/15/13 08:10	
Nickel, Dissolved	ug/L	ND	10.0	04/15/13 08:10	
Potassium, Dissolved	ug/L	ND	500	04/15/13 08:10	
Selenium, Dissolved	ug/L	ND	8.0	04/15/13 08:10	
Silver, Dissolved	ug/L	ND	6.0	04/15/13 08:10	
Sodium, Dissolved	ug/L	ND	1000	04/15/13 08:10	
Thaillum, Dissolved	ug/L	ND	10.0	04/15/13 08:10	
Vanadium, Dissolved	ug/L	ND	5.0	04/15/13 08:10	
Zinc, Dissolved	ug/L	ND	10.0	04/15/13 08:10	

LABORATORY CONTROL SAMPLE:	567485					
Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Aluminum, Dissolved	ug/L	5000	5250	105	80-120	
Antimony, Dissolved	ug/L	500	510	102	80-120	
Arsenic, Dissolved	ug/L	500	517	103	80-120	
Barlum, Dissolved	ug/L	500	521	104	80-120	
Beryllium, Dissolved	ug/L	500	532	106	80-120	
Boron, Dissolved	ug/L	500	507	101	80-120	
Cadmium, Dissolved	ug/L	500	518	104	80-120	
Calcium, Dissolved	ug/L	5000	5300	106	80-120	
Chromium, Dissolved	ug/L	500	514	103	80-120	
Cobalt, Dissolved	ug/L	500	507	101	80-120	
Copper, Dissolved	ug/L	500	527	105	80-120	
Iron, Dissolved	ug/L	5000	5370	107	80-120	
Lead, Dissolved	ug/L	500	508	102	80-120	

Date: 04/24/2013 04:54 PM

REPORT OF LABORATORY ANALYSIS

Page 38 of 51

This report shall not be reproduced, except in full, without the written consent of Pace Analytical Services, Inc..



QUALITY CONTROL DATA

Project: McDonalds Edgewood

Pace Project No.: 3091547

LABORATORY CONTROL SAMPLE: 567485

22. 001400					
Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
ug/L	5000	5360	107	80-120	
ug/L	500	535	107	80-120	
ug/L	500	519	104	80-120	
ug/L	500	534	107	80-120	
ug/L	5000	5180	104	80-120	
ug/L	500	521	104	80-120	
ug/L	250	249	100	80-120	
ug/L	5000	5330	107	80-120	
ug/L	500	500	100	80-120	
ug/L	500	496	99	80-120	
ug/L	500	540	108	80-120	
	Units ug/L ug/L	Units Spike Conc. Ug/L 5000 ug/L 500 ug/L 500 ug/L 500 ug/L 5000 ug/L 5000 ug/L 250 ug/L 5000 ug/L 5000	Units Splike Conc. LCS Result ug/L 5000 5360 ug/L 500 535 ug/L 500 519 ug/L 500 534 ug/L 5000 5180 ug/L 500 521 ug/L 250 249 ug/L 500 5330 ug/L 500 500 ug/L 500 496	Units Spike Conc. LCS Result LCS % Rec ug/L 5000 5360 107 ug/L 500 535 107 ug/L 500 519 104 ug/L 500 534 107 ug/L 5000 5180 104 ug/L 500 521 104 ug/L 250 249 100 ug/L 5000 5330 107 ug/L 500 500 100 ug/L 500 496 99	Units Spike Conc. LCS Result LCS % Rec % Rec Limits ug/L 5000 5360 107 80-120 ug/L 500 535 107 80-120 ug/L 500 519 104 80-120 ug/L 500 534 107 80-120 ug/L 500 5180 104 80-120 ug/L 500 521 104 80-120 ug/L 250 249 100 80-120 ug/L 500 530 107 80-120 ug/L 500 500 100 80-120 ug/L 500 496 99 80-120

MATRIX SPIKE SAMPLE:	567490	•			•	•	
D	1 hade	3091540005	Spike	MS	MS	% Rec	0
Parameter	Units	Result	Conc.	Result	% Rec	Limits	Qualifier
Aluminum, Dissolved	ug/L	ND	5000	5420	108	80-120	
Antimony, Dissolved	ug/L	ND	500	553	111	80-120	
Arsenic, Dissolved	ug/L	20.4	500	602	116	80-120	
Barlum, Dissolved	ug/L	348	500	880	106	80-120	
Beryllium, Dissolved	ug/L	ND	500	530	106	80-120	
Boron, Dissolved	ug/L	72.0	500	590	104	80-120	
Cadmium, Dissolved	ug/L	ND	500	565	113	80-120	
Calcium, Dissolved	ug/L	223000	5000	234000	218	80-120 /	W1
Chromium, Dissolved	ug/L	ND	500	536	107	80-120	
Cobalt, Dissolved	ug/L	11.0	500	571	112	80-120	
Copper, Dissolved	ug/L	ND	500	544	108	80-120	
ron, Dissolved	ug/L	266	5000	5610	107	80-120	
.ead, Dissolved	ug/L	ND	500	553	110	80-120	
Magnesium, Dissolved	ug/L	44700	5000	51100	128	80-120 /	W1
Manganese, Dissolved	ug/L	5460	500	6130	132	80-120 /	W1
Molybdenum, Dissolved	ug/L	ND	500	607	121	80-120 /	VI1
Nickel, Dissolved	ug/L	24.2	500	536	102	80-120	
Potassium, Dissolved	ug/L	19200	5000	25500	125	80-120 /	W1
Selenium, Dissolved	ug/L	ND	500	581	115	80-120	
Silver, Dissolved	ug/L	ND	250	280	112	80-120	
Sodium, Dissolved	ug/L	1080000	5000	1090000	280	80-120 /	V1
Thaillum, Dissolved	ug/L	ND	500	498	100	80-120	
Vanadium, Dissolved	ug/L	ND	500	527	105	80-120	
Zinc, Dissolved	ug/L	49.6	500	590	108	80-120	

SAMPLE DUPLICATE: 567489

Parameter	Units	3091540005 Result	Dup Result	RPD	Qualifiers
Aluminum, Dissolved Antimony, Dissolved	ug/L ug/L	ND ND	34.7J ND		

Date: 04/24/2013 04:54 PM

REPORT OF LABORATORY ANALYSIS

Page 39 of 51

This report shall not be reproduced, except in full, without the written consent of Pace Analytical Services, inc..



Pace Analytical Services, Inc. 1638 Roseytown Road - Suites 2,3,4

Greensburg, PA 15601 (724)850-5600

QUALITY CONTROL DATA

Project: McDonalds Edgewood

Pace Project No.: 3091547

SAMPLE DUPLICATE: 567489

Parameter	Unite	3091540005	Dup	RPD	Ourilland
Parameter	Units	Result	Result	RPD	Qualifiers
Arsenic, Dissolved	ug/L	20.4	21.4	5	
Barlum, Dissolved	ug/L	348	348	.03	
Beryllium, Dissolved	ug/L	ND	ND		
Boron, Dissolved	ug/L	72.0	71.6	.6	
Cadmium, Dissolved	ug/L	ND	ND		
Calcium, Dissolved	ug/L	223000	223000	.1	
Chromium, Dissolved	ug/L	ND	30.8		
Cobalt, Dissolved	ug/L	11.0	11.4	3	
Copper, Dissolved	ug/L	ND	7.4		
Iron, Dissolved	ug/L	266	492	60 0)6
Lead, Dissolved	ug/L	ND	3.9J		
Magnesium, Dissolved	ug/L	44700	44700	.09	
Manganese, Dissolved	ug/L	5460	5500	.7	
Molybdenum, Dissolved	ug/L	ND	3.8J		
Nickel, Dissolved	ug/L	24.2	25.5	5	
Potassium, Dissolved	ug/L	19200	19300	.3	
Selenium, Dissolved	ug/L	ND	5.7J		
Silver, Dissolved	ug/L	ND	ND		
Sodium, Dissolved	ug/L	1080000	1120000	3	
Thaillum, Dissolved	ug/L	ND	ND		
Vanadium, Dissolved	ug/L	ND	ND		
Zinc, Dissolved	ug/L	49.6	49.7	.2	

Date: 04/24/2013 04:54 PM



QUALITY CONTROL DATA

McDonalds Edgewood Project:

Pace Project No.: 3091547

Analysis Method: QC Batch: MSV/15857 EPA 8260

Analysis Description: 8260 MSV 5035 Low QC Batch Method: EPA 8260

Associated Lab Samples: 3091547001, 3091547002, 3091547003, 3091547004, 3091547005, 3091547006, 3091547007, 3091547008, 3091547010

METHOD BLANK: 568237 Matrix: Solid

Associated Lab Samples: 3091547001, 3091547002, 3091547003, 3091547004, 3091547005, 3091547006, 3091547007, 3091547008, 3091547010

30913	547009, 3091547010				
		Blank	Reporting		
Parameter	Units	Result	Limit	Analyzed	Qualifiers
1,1,1-Trichioroethane	ug/kg	ND	5.0	04/15/13 12:47	
1,1,2,2-Tetrachioroethane	ug/kg	ND	5.0	04/15/13 12:47	
1,1,2-Trichloroethane	ug/kg	ND	5.0	04/15/13 12:47	
1,1-Dichloroethane	ug/kg	ND	5.0	04/15/13 12:47	
1,1-Dichloroethene	ug/kg	ND	5.0	04/15/13 12:47	
1,2-Dichlorobenzene	ug/kg	ND	5.0	04/15/13 12:47	
1,2-Dichloroethane	ug/kg	ND	5.0	04/15/13 12:47	
1,2-Dichioropropane	ug/kg	ND	5.0	04/15/13 12:47	
1,3-Dichlorobenzene	ug/kg	ND	5.0	04/15/13 12:47	
1,4-Dichlorobenzene	ug/kg	ND	5.0	04/15/13 12:47	
2-Butanone (MEK)	ug/kg	ND	10.0	04/15/13 12:47	
2-Hexanone	ug/kg	ND	10.0	04/15/13 12:47	
4-Methyl-2-pentanone (MIBK)	ug/kg	ND	10.0	04/15/13 12:47	
Acetone	ug/kg	ND	10.0	04/15/13 12:47	
Benzene	ug/kg	ND	5.0	04/15/13 12:47	
Bromodichioromethane	ug/kg	ND	5.0	04/15/13 12:47	
Bromoform	ug/kg	ND	5.0	04/15/13 12:47	
Bromomethane	ug/kg	ND	5.0	04/15/13 12:47	
Carbon disulfide	ug/kg	ND	5.0	04/15/13 12:47	
Carbon tetrachloride	ug/kg	ND	5.0	04/15/13 12:47	
Chlorobenzene	ug/kg	ND	5.0	04/15/13 12:47	
Chloroethane	ug/kg	ND	5.0	04/15/13 12:47	
Chloroform	ug/kg	ND	5.0	04/15/13 12:47	
Chloromethane	ug/kg	ND	5.0	04/15/13 12:47	
cls-1,2-Dichloroethene	ug/kg	ND	5.0	04/15/13 12:47	
cls-1,3-Dichloropropene	ug/kg	ND	5.0	04/15/13 12:47	
Dibromochloromethane	ug/kg	ND	5.0	04/15/13 12:47	
Ethylbenzene	ug/kg	ND	5.0	04/15/13 12:47	
m&p-Xylene	ug/kg	ND	10.0	04/15/13 12:47	
Methyl-tert-butyl ether	ug/kg	ND	5.0	04/15/13 12:47	
Methylene Chloride	ug/kg	ND	5.0	04/15/13 12:47	
o-Xylene	ug/kg	ND	5.0	04/15/13 12:47	
Styrene	ug/kg	ND	5.0	04/15/13 12:47	
Tetrachioroethene	ug/kg	ND	5.0	04/15/13 12:47	
Toluene	ug/kg	ND	5.0	04/15/13 12:47	
TOTAL BTEX	ug/kg	ND	30.0	04/15/13 12:47	
trans-1,2-Dichloroethene	ug/kg	ND	5.0	04/15/13 12:47	
trans-1,3-Dichloropropene	ug/kg	ND	5.0	04/15/13 12:47	
Trichloroethene	ug/kg	ND	5.0	04/15/13 12:47	
Vinyl chloride	ug/kg	ND	5.0	04/15/13 12:47	
Xylene (Total)	ug/kg	ND	15.0	04/15/13 12:47	

Date: 04/24/2013 04:54 PM

REPORT OF LABORATORY ANALYSIS

Page 41 of 51

This report shall not be reproduced, except in full, without the written consent of Pace Analytical Services, Inc..



QUALITY CONTROL DATA

Project: McDonalds Edgewood

Pace Project No.: 3091547

METHOD BLANK: 568237 Matrix: Solid

Associated Lab Samples: 3091547001, 3091547002, 3091547003, 3091547004, 3091547005, 3091547006, 3091547007, 3091547008, 3091547010

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,2-Dichloroethane-d4 (S)	%	102	70-130	04/15/13 12:47	
4-Bromofluorobenzene (S)	%	105	70-130	04/15/13 12:47	
Toluene-d8 (S)	%	94	70-130	04/15/13 12:47	

LABORATORY CONTROL SAMPLE:	568238					
		Spike	LCS	LCS	% Rec	
Parameter	Units	Conc.	Result	% Rec	Limits	Qualifiers
1,1-Trichioroethane	ug/kg	20	15.6	78	55-141	
,1,2,2-Tetrachioroethane	ug/kg	20	15.1	75	58-124	
,1,2-Trichioroethane	ug/kg	20	15.8	79	70-118	
I,1-Dichloroethane	ug/kg	20	16.1	81	64-127	
,1-Dichloroethene	ug/kg	20	17.4	87	50-133	
,2-Dichlorobenzene	ug/kg	20	16.5	83	67-122	
,2-Dichloroethane	ug/kg	20	16.4	82	54-132	
,2-Dichloropropane	ug/kg	20	16.9	85	68-112	
,3-Dichlorobenzene	ug/kg	20	16.7	84	65-127	
,4-Dichlorobenzene	ug/kg	20	16.2	81	66-127	
-Butanone (MEK)	ug/kg	20	20.8	104	54-135	
-Hexanone	ug/kg	20	20.0	100	58-148	
-Methyl-2-pentanone (MIBK)	ug/kg	20	19.1	96	55-142	
cetone	ug/kg	20	17.5	88	39-200	
enzene	ug/kg	20	17.0	85	65-130	
romodichioromethane	ug/kg	20	14.9	75	57-125	
romoform	ug/kg	20	16.2	81	53-121	
romomethane	ug/kg	20	12.3	62	30-167	
arbon disulfide	ug/kg	20	24.2	121	49-150	
arbon tetrachioride	ug/kg	20	16.3	81	47-146	
hiorobenzene	ug/kg	20	15.7	79	67-124	
hioroethane	ug/kg	20	23.8	119	34-170	
hioroform	ug/kg	20	17.1	85	63-128	
hioromethane	ug/kg	20	15.8	79	39-159	
is-1,2-Dichloroethene	ug/kg	20	16.6	83	64-126	
ls-1,3-Dichloropropene	ug/kg	20	16.5	82	66-124	
Ibromochloromethane	ug/kg	20	16.3	81	56-122	
thylbenzene	ug/kg	20	16.0	80	65-131	
1&p-Xylene	ug/kg	40	32.8	82	63-136	
fethyl-tert-butyl ether	ug/kg	20	18.5	93	71-130	
lethylene Chloride	ug/kg	20	15.1	76	45-136	
-Xylene	ug/kg	20	16.0	80	68-129	
tyrene	ug/kg	20	19.0	95	64-122	
etrachloroethene	ug/kg	20	16.4	82	61-138	
bluene	ug/kg	20	15.7	79	63-132	
OTAL BTEX	ug/kg		97.5			
rans-1,2-Dichloroethene	ug/kg	20	17.4	87	60-130	

Date: 04/24/2013 04:54 PM

REPORT OF LABORATORY ANALYSIS

Page 42 of 51

This report shall not be reproduced, except in full, without the written consent of Pace Analytical Services, Inc..



QUALITY CONTROL DATA

Project: McDonalds Edgewood

Pace Project No.: 3091547

LABORATORY CONTROL SAMPLE: 568238

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
trans-1,3-Dichloropropene	ug/kg	20	15.6	78	58-116	
Trichioroethene	ug/kg	20	16.9	84	65-131	
Vinyl chloride	ug/kg	20	24.4	122	49-149	
Xylene (Total)	ug/kg	60	48.9	81	65-134	
1,2-Dichloroethane-d4 (S)	%			107	70-130	
4-Bromofluorobenzene (S)	%			103	70-130	
Toluene-d8 (S)	%			95	70-130	



QUALITY CONTROL DATA

Project McDonalds Edgewood

Pace Project No.: 3091547

QC Batch: MSV/15823 Analysis Method: EPA 8260 QC Batch Method: EPA 8260 Analysis Description: 8260 MSV

Associated Lab Samples: 3091547011, 3091547012, 3091547018

METHOD BLANK: 567158 Matrix: Water

Associated Lab Samples: 3091547011, 3091547012, 3091547018

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichioroethane	ug/L	ND	1.0	04/12/13 11:46	
1,1,2,2-Tetrachioroethane	ug/L	ND	1.0	04/12/13 11:46	
1,1,2-Trichloroethane	ug/L	ND	1.0	04/12/13 11:46	
1,1-Dichloroethane	ug/L	ND	1.0	04/12/13 11:46	
1,1-Dichloroethene	ug/L	ND	1.0	04/12/13 11:46	
1,2,4-Trichlorobenzene	ug/L	ND	1.0	04/12/13 11:46	
1,2-Dichlorobenzene	ug/L	ND	1.0	04/12/13 11:46	
1.2-Dichloroethane	ug/L	ND	1.0	04/12/13 11:46	
1,2-Dichloropropane	ug/L	ND	1.0	04/12/13 11:46	
1.3-Dichlorobenzene	ug/L	ND	1.0	04/12/13 11:46	
1.4-Dichlorobenzene	ug/L	ND	1.0	04/12/13 11:46	
2-Butanone (MEK)	ug/L	ND	10.0	04/12/13 11:46	
2-Hexanone	ug/L	ND	10.0	04/12/13 11:46	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	10.0	04/12/13 11:46	
Acetone	ug/L	ND		04/12/13 11:46	
Benzene	ug/L	ND		04/12/13 11:46	
Bromochioromethane	ug/L	ND	1.0	04/12/13 11:46	
Bromodichioromethane	ug/L	ND	1.0	04/12/13 11:46	
Bromoform	ug/L	ND		04/12/13 11:46	
Bromomethane	ug/L	ND.		04/12/13 11:46	
Carbon disulfide	ug/L	ND		04/12/13 11:46	
Carbon tetrachloride	ug/L	ND		04/12/13 11:46	
Chlorobenzene	ug/L	ND		04/12/13 11:46	
Chloroethane	ug/L	ND	1.0	04/12/13 11:46	
Chloroform	ug/L	ND.	1.0	04/12/13 11:46	
Chloromethane	ug/L	ND	1.0		
dis-1,2-Dichloroethene	ug/L	ND ND	_	04/12/13 11:46	
ds-1,3-Dichloropropene	ug/L	ND	-	04/12/13 11:46	
Dibromochioromethane	-	ND ND		04/12/13 11:46	
Ethylbenzene	ug/L	ND ND		04/12/13 11:46	
n&p-Xylene	ug/L ug/L	ND ND	_	04/12/13 11:46	
	-	ND ND		04/12/13 11:46	
Methyl-tert-butyl ether	ug/L	ND ND	1.0		
Methylene Chloride	ug/L	ND ND		04/12/13 11:46	
>Xylene	ug/L	ND ND		04/12/13 11:46	
Styrene Fotrachioroothoog	ug/L	ND ND			
Tetrachioroethene	ug/L		1.0	04/12/13 11:46	
Foluene	ug/L	ND		04/12/13 11:46	
rans-1,2-Dichloroethene	ug/L	ND		04/12/13 11:46	
rans-1,3-Dichloropropene	ug/L	ND	-	04/12/13 11:46	
Trichloroethene	ug/L	ND	1.0	04/12/13 11:46	
/Inyl chloride	ug/L	ND	1.0	04/12/13 11:46	
Kylene (Total) 1,2-Dichloroethane-d4 (S)	ug/L %	ND 101	3.0	04/12/13 11:46 04/12/13 11:46	

Page 44 of 51

This report shall not be reproduced, except in full, without the written consent of Pace Analytical Services, Inc..



QUALITY CONTROL DATA

Project: McDonalds Edgewood

Pace Project No.: 3091547

METHOD BLANK: 567158 Matrix: Water

Associated Lab Samples: 3091547011, 3091547012, 3091547018

LABORATORY CONTROL SAMPLE:	567159					
		Spike	LCS	LCS	% Rec	
Parameter	Units	Conc.	Result	% Rec	Limits	Qualifiers
I,1,1-Trichioroethane	ug/L	20	21.3	106	62-125	
1,1,2,2-Tetrachioroethane	ug/L	20	18.5	92	61-117	
1,1,2-Trichioroethane	ug/L	20	20.1	101	72-119	
I,1-Dichloroethane	ug/L	20	20.2	101	63-123	
1,1-Dichloroethene	ug/L	20	20.9	105	57-127	
1,2,4-Trichiorobenzene	ug/L	20	19.4	97	52-138	
,2-Dichlorobenzene	ug/L	20	18.0	90	70-116	
1,2-Dichloroethane	ug/L	20	20.7	104	62-125	
1,2-Dichloropropane	ug/L	20	18.8	94	69-115	
1,3-Dichlorobenzene	ug/L	20	17.5	87	71-118	
1,4-Dichlorobenzene	ug/L	20	17.6	88	67-119	
2-Butanone (MEK)	ug/L	20	23.2	116	48-136	
2-Hexanone	ug/L	20	23.5	118	52-130	
4-Methyl-2-pentanone (MIBK)	ug/L	20	21.0	105	57-124	
Acetone	ug/L	20	29.3	146	49-138 L	.1
enzene	ug/L	20	18.6	93	66-122	
Bromochloromethane	ug/L	20	20.2	101	61-126	
romodichioromethane	ug/L	20	19.8	99	63-118	
iromoform	ug/L	20	21.0	105	46-130	
romomethane	ug/L	20	26.1	131	10-175	
Carbon disulfide	ug/L	20	27.7	138	59-142	
arbon tetrachioride	ug/L	20	20.5	102	55-126	
chlorobenzene	ug/L	20	18.8	94	70-121	
Chloroethane	ug/L	20	20.0	100	24-161	
chloroform	ug/L	20	21.4	107	62-126	
Chloromethane	ug/L	20	21.9	110	37-147	
ls-1,2-Dichloroethene	ug/L	20	20.7	103	64-121	
ds-1,3-Dichloropropene	ug/L	20	18.7	94	64-118	
Obromochloromethane	ug/L	20	20.3	101	60-120	
thylbenzene	ug/L	20	19.7	99	69-119	
n&p-Xylene	ug/L	40	38.1	95	70-124	
Methyl-tert-butyl ether	ug/L	20	21.7	108	58-131	
lethylene Chloride	ug/L	20	21.7	108	59-128	
-Xylene	ug/L	20	18.8	94	67-123	
tyrene	ug/L	20	24.2	121	67-146	
Tetrachioroethene	ug/L	20	19.4	97	62-125	
Toluene	ug/L	20	18.7	93	72-115	
rans-1,2-Dichloroethene	ug/L	20	20.4	102	59-122	
rans-1,3-Dichioropropene	ug/L	20	17.8	89	64-120	

Date: 04/24/2013 04:54 PM

REPORT OF LABORATORY ANALYSIS

Page 45 of 51

This report shall not be reproduced, except in full, without the written consent of Pace Analytical Services, inc..



QUALITY CONTROL DATA

Project: McDonalds Edgewood

Pace Project No.: 3091547

LABORATORY CONTROL SAMPLE: 567159

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Trichioroethene	ug/L	20	19.5	97	62-125	
Vinyl chloride	ug/L	20	21.8	109	52-145	
Xylene (Total)	ug/L	60	56.9	95	70-123	
1,2-Dichloroethane-d4 (S)	%			111	77-119	
4-Bromofluorobenzene (S)	%			99	85-115	
Toluene-d8 (S)	%			99	85-115	

MATRIX SPIKE & MATRIX SPIK	E DUPLICATE	56732			567322						
			MS	MSD							
Parameter	Units	91539001 Result	Spike Conc.	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
1,1,1-Trichioroethane	ug/L	ND	20	20	19.0	19.8	95	99	62-125	4	
1,1,2,2-Tetrachloroethane	ug/L	ND	20	20	17.1	16.4	86	82	61-117	4	
1,1,2-Trichioroethane	ug/L	ND	20	20	18.2	17.6	91	88	72-119	4	
1,1-Dichioroethane	ug/L	ND	20	20	19.6	19.2	98	96	63-123	2	
1,1-Dichloroethene	ug/L	ND	20	20	19.5	20.2	97	101	57-127	4	
1,2,4-Trichiorobenzene	ug/L	ND	20	20	17.6	18.7	88	94	52-138	6	
1,2-Dichiorobenzene	ug/L	ND	20	20	16.3	17.5	81	88	70-116	7	
1,2-Dichloroethane	ug/L	ND	20	20	20.1	19.3	101	96	62-125	4	
1,2-Dichloropropane	ug/L	ND	20	20	17.8	16.6	89	83	69-115	7	
1,3-Dichlorobenzene	ug/L	ND	20	20	16.1	16.6	80	83	71-118	3	
1,4-Dichlorobenzene	ug/L	ND	20	20	16.6	17.5	83	87	67-119	5	
2-Butanone (MEK)	ug/L	ND	20	20	22.6	20.7	113	104	48-136	9	
2-Hexanone	ug/L	ND	20	20	20.2	18.5	101	92	52-130	9	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	20	20	18.8	17.4	94	87	57-124	8	
Acetone	ug/L	ND	20	20	19.1	20.4	96	102	49-138	6	
Benzene	ug/L	ND	20	20	17.5	18.1	88	91	66-122	4	
Bromochloromethane	ug/L	ND	20	20	21.1	20.2	105	101	61-126	4	
Bromodichioromethane	ug/L	ND	20	20	18.0	17.6	90	88	63-118	2	
Bromoform	ug/L	ND	20	20	18.7	18.3	93	92	46-130	2	
Bromomethane	ug/L	ND	20	20	16.9	15.8	85	79	10-175	7	
Carbon disulfide	ug/L	ND	20	20	25.8	24.4	129	122	59-142	5	
Carbon tetrachioride	ug/L	ND	20	20	19.5	21.0	98	105	55-126	7	
Chlorobenzene	ug/L	ND	20	20	17.8	18.0	89	90	70-121	1	
Chloroethane	ug/L	ND	20	20	22.1	19.7	110	98	24-161	11	
Chloroform	ug/L	ND	20	20	19.6	19.2	98	96	62-126	2	
Chloromethane	ug/L	ND	20	20	19.5	19.4	97	97	37-147	.2	
cls-1,2-Dichloroethene	ug/L	ND	20	20	18.9	19.6	94	98	64-121	4	
cls-1,3-Dichloropropene	ug/L	ND	20	20	18.5	18.9	93	95	64-118	2	
Dibromochloromethane	ug/L	ND	20	20	18.6	18.1	93	90	60-120	3	
Ethylbenzene	ua/L	ND	20	20	18.2	18.5	91	93	69-119	2	
m&p-Xylene	ug/L	ND	40	40	36.0	36.7	90	92	70-124	2	
Methyl-tert-butyl ether	ug/L	ND	20	20	20.0	18.1	100	90	58-131	10	
Methylene Chloride	ug/L	ND	20	20	18.1	18.0	90	90	59-128	.5	
o-Xylene	ug/L	ND	20	20	17.4	18.2	87	91	67-123	4	
Styrene	ug/L	ND	20	20	23.1	22.4	115	112	67-146	3	
Tetrachioroethene	ug/L	ND	20	20	18.9	17.6	94	88	62-125	7	

Date: 04/24/2013 04:54 PM

REPORT OF LABORATORY ANALYSIS

Page 46 of 51

This report shall not be reproduced, except in full, without the written consent of Pace Analytical Services, inc...



QUALITY CONTROL DATA

Project: McDonalds Edgewood

Pace Project No.: 3091547

MATRIX SPIKE & MATRIX SP	IKE DUPLICAT	E: 56732	1		567322						
Parameter	Units	091539001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
Toluene	ug/L	ND	20	20	17.2	17.9	86	90	72-115	4	
rans-1,2-Dichloroethene	ug/L	ND	20	20	19.2	19.8	96	99	59-122	3	
rans-1,3-Dichloropropene	ug/L	ND	20	20	18.4	17.1	92	85	64-120	7	
Trichloroethene	ug/L	ND	20	20	16.8	18.7	84	93	62-125	10	
/Inyl chloride	ug/L	ND	20	20	21.3	21.2	106	106	52-145	.4	
(ylene (Total)	ug/L	ND	60	60	53.5	54.9	89	91	70-123	3	
,2-Dichloroethane-d4 (S)	%						100	99	77-119		
-Bromofluorobenzene (S)	%						97	98	85-115		
foluene-d8 (S)	%						95	91	85-115		

Date: 04/24/2013 04:54 PM

REPORT OF LABORATORY ANALYSIS

Page 47 of 51



QUALITY CONTROL DATA

Project: McDonalds Edgewood

Pace Project No.: 3091547

QC Batch: PMST/3741

QC Batch: PMST/3741 Analysis Method: ASTM D2974-87
QC Batch Method: ASTM D2974-87 Analysis Description: Dry Weight/Percent Moisture

Associated Lab Samples: 3091547001, 3091547002, 3091547003, 3091547004

SAMPLE DUPLICATE: 569950

3091536001 Dup Parameter Result RPD Qualifiers Result Units 15.4 Percent Moisture

SAMPLE DUPLICATE: 569951

3091547004 Dup Result Result Units Result RPD Qualifiers Parameter 12.2 Percent Moisture

Date: 04/24/2013 04:54 PM

REPORT OF LABORATORY ANALYSIS

Page 48 of 51



QUALITY CONTROL DATA

Project: McDonalds Edgewood

Pace Project No.: 3091547

PMST/3742 Analysis Method: QC Batch:

Analysis Method: ASTM D2974-87
Analysis Description: Dry Weight/Percent Moisture QC Batch Method: ASTM D2974-87

Associated Lab Samples: 3091547005, 3091547006, 3091547007, 3091547008, 3091547009, 3091547010, 3091547013, 3091547014, 3091547017

SAMPLE DUPLICATE: 569975

3091665001 Dup Parameter Units
 Result
 Result
 RPD

 5.9
 5.4
 8
 Result Qualifiers Percent Moisture

SAMPLE DUPLICATE: 569976

3091585001 Dup Parameter Units Result Result RPD Qualifiers ND Percent Moisture



QUALIFIERS

Project: McDonalds Edgewood

Pace Project No.: 3091547

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PRL - Pace Reporting Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

BATCH QUALIFIERS

Batch: MSV/15857

[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

ANALYTE QUALIFIERS

D6 The relative percent difference (RPD) between the sample and sample duplicate exceeded laboratory control limits.
Analyte recovery in the laboratory control sample (LCS) was above QC limits. Results for this analyte in associated samples may be blased high.

M1 Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.



QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: McDonalds Edgewood

Pace Project No.: 3091547

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
3091547013	B1 1-2.5	EPA 3050	MPRP/10476	EPA 6010B	ICP/9858
3091547014	B3 1-2.5	EPA 3050	MPRP/10476	EPA 6010B	ICP/9858
3091547015	B5 0-1.5	EPA 3050	MPRP/10476	EPA 6010B	ICP/9858
3091547016	B7 0-1.5	EPA 3050	MPRP/10476	EPA 6010B	ICP/9858
3091547017	B9 0-1.5	EPA 3050	MPRP/10476	EPA 6010B	ICP/9858
3091547011	B8	EPA 3005	MPRP/10482	EPA 6010	ICP/9863
3091547012	B9	EPA 3005	MPRP/10482	EPA 6010	ICP/9863
3091547011	B8	EPA 7470	MERP/4338	EPA 7470	MERC/4167
3091547012	B9	EPA 7470	MERP/4338	EPA 7470	MERC/4167
3091547013	B1 1-2.5	EPA 7471	MERP/4341	EPA 7471	MERC/4170
3091547014	B3 1-2.5	EPA 7471	MERP/4341	EPA 7471	MERC/4170
3091547015	B5 0-1.5	EPA 7471	MERP/4341	EPA 7471	MERC/4170
3091547016	B7 0-1.5	EPA 7471	MERP/4341	EPA 7471	MERC/4170
3091547017	B9 0-1.5	EPA 7471	MERP/4341	EPA 7471	MERC/4170
3091547001	B1 12-13.5	EPA 8260	MSV/15857		
3091547002	B2 6-7.5	EPA 8260	MSV/15857		
3091547003	B3 12-13.5	EPA 8260	MSV/15857		
3091547004	B4 6-7.5	EPA 8260	MSV/15857		
3091547005	B5 3-4.5	EPA 8260	MSV/15857		
3091547006	B6 13.5-15	EPA 8260	MSV/15857		
3091547007	B7 0-1.5	EPA 8260	MSV/15857		
3091547008	B8 1.5-3	EPA 8260	MSV/15857		
3091547009	B9 4.5-6	EPA 8260	MSV/15857		
3091547010	B10 1.5-3	EPA 8260	MSV/15857		
3091547011	B8	EPA 8260	MSV/15823		
3091547012	B9	EPA 8260	MSV/15823		
3091547018	Trip Blank	EPA 8260	MSV/15823		
3091547001	B1 12-13.5	ASTM D2974-87	PMST/3741		
3091547002	B2 6-7.5	ASTM D2974-87	PMST/3741		
3091547003	B3 12-13.5	ASTM D2974-87	PMST/3741		
3091547004	B4 6-7.5	ASTM D2974-87	PMST/3741		
3091547005	B5 3-4.5	ASTM D2974-87	PMST/3742		
3091547006	B6 13.5-15	ASTM D2974-87	PMST/3742		
3091547007	B7 0-1.5	ASTM D2974-87	PMST/3742		
3091547008	B8 1.5-3	ASTM D2974-87	PMST/3742		
3091547009	B9 4.5-6	ASTM D2974-87	PMST/3742		
3091547010	B10 1.5-3	ASTM D2974-87	PMST/3742		
3091547013	B1 1-2.5	ASTM D2974-87	PMST/3742		
3091547014	B3 1-2.5	ASTM D2974-87	PMST/3742		
3091547015	B5 0-1.5	ASTM D2974-87	PMST/3742		
3091547016	B7 0-1.5	ASTM D2974-87	PMST/3742		
3091547017	B9 0-1.5	ASTM D2974-87	PMST/3742		

Date: 04/24/2013 04:54 PM

REPORT OF LABORATORY ANALYSIS

Page 51 of 51

This report shall not be reproduced, except in full, without the written consent of Pace Analytical Services, inc..